## BEFORE THE PUBLIC UTILITIES COMMISSION

## OF THE STATE OF HAWAII

In the Matter of	)	
PUBLIC UTILITIES COMMISSION	)	DOCKET NO. 2008-0273
Instituting a Proceeding to Investigate the Implementation of Feed-in Tariffs	)	

**PROPOSED TIERS 1 AND 2 TARIFFS** OF CLEAN ENERGY MAUI LLC AND ZERO EMISSIONS LEASING LLC

**AND** 

**CERTIFICATE OF SERVICE** 

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## PROPOSED TIERS 1 AND 2 TARIFFS OF OF CLEAN ENERGY MAUI LLC AND ZERO EMISSIONS LEASING LLC

CLEAN ENERGY MAUI LLC ("Clean Energy Maui") and ZERO EMISSIONS LEASING LLC ("Zero Emissions") respectfully submit the following Proposed Tiers 1 and 2 Tariffs, consisting of a proposed Schedule FIT for Purchases from Renewable Energy Generators for each of Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited (the "HECO Companies"), together with a proposed Standard Schedule FIT Tier 1 and Tier 2 Agreement for use by each of the HECO Companies, in the above-referenced proceeding.

DATED: Honolulu, Hawaii, January 7, 2010

Erik Kvam

Chief Executive Officer

Zero Emissions Leasing LLC

Chris Montzel by End Kvan. Chris Mentzel

President

Clean Energy Maui LLC

#### SCHEDULE FIT

## Feed-in Tariff - Purchases from Renewable Energy Generators

#### Definitions:

For the purposes of this Schedule:

- (1) "Baseline Energy" means energy generated or produced from wind, sun, falling water, biogas (including landfill and sewage-based digester gas), geothermal, ocean water, currents, and waves, including ocean thermal energy conversion, biomass (including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste), and hydrogen produced from renewable resources, other than Renewable Energy generated by a Photovoltaic Generating Facility, a Concentrating Solar Power Facility, an Onshore Wind Generating Facility or an In-line Hydropower Generating Facility.
- (2) "Baseline Generating Facility" means a Renewable Energy Generating Facility that generates electricity from Baseline Energy.
- (3) "Commission" means the State of Hawaii Public Utilities Commission.
- (4) "Company" means Hawaiian Electric Company, Inc.
- (5) "Concentrating Solar Power Facility" means a Renewable Energy Generating Facility that generates electricity by concentrating solar radiation to heat a working fluid that drives a generator.
- (6) "Electrical Capacity" means the installed maximum nameplate alternating-current electricity generating capacity, in kilowatts, of a Renewable Energy Generating Facility.
- (7) "FIT Reliability Standards" means standards developed and adopted by the Company, and approved by the Commission, that establish when an additional Renewable Energy Generating Facility can or cannot be interconnected with the Company's electric system on an island or region therein without markedly increasing curtailment of existing or new Renewable Energy Generating Facilities, including the Company's existing standards contained in the Company's tariff Rule 14H.
- (8) "In-Line Hydropower" means hydroelectric generation that utilizes energy from a water pipeline system that is designed primarily to serve another functional purpose where a section of pipeline is replaced with a turbine-generator section.

- (9) "In-Line Hydropower Generating Facility" means a Renewable Energy Generating Facility that generates electricity from In-Line Hydropower.
- (10) "Onshore Wind Generating Facility" means any Wind Generating Facility that is not located in an ocean water depth of 20 meters or more.
- (11) "Photovoltaic Generating Facility" means a Renewable Energy Generating Facility that uses photovoltaic material to generate electricity from solar radiation.
- "Renewable Energy Generating Facility" means any identifiable facility, plant, installation, project, equipment, apparatus, or the like, located in the State of Hawaii, placed in service after the effective date of this Schedule, and that generates Renewable Energy from a Renewable Energy Source.
- (13) "Renewable Energy Generator" means any person that owns, controls, operates, manages, or uses a Renewable Energy Generating Facility to generate Renewable Energy from a Renewable Energy Source.
- (14) "Renewable Energy Source" means the following sources of energy:
  - (a) In-Line Hydropower;
  - (b) solar radiation;
  - (c) wind;
  - (d) Baseline Energy.
- "Renewable Energy" means electricity generated by a Renewable Energy Generating Facility from a Renewable Energy Source.
- (16) "Wind Generating Facility" means a Renewable Energy Generating Facility that generates electricity from wind.

#### Interconnection

Upon the application of a Renewable Energy Generator that places a Renewable Energy Generating Facility in service, the Company shall interconnect such Renewable Energy Generating Facility to the electric system of the Company, provided that technical requirements set forth in the Company's FIT Reliability Standards, as approved by the Commission, are met. If the Company decides, after performing an interconnection requirements study ("IRS"), that such Renewable Energy Generating Facility does not meet such technical requirements, the Company shall file a detailed report with the Commission explaining the reasons why such Renewable Energy Generating Facility does not meet such technical requirements.

Costs incurred to meet technical requirements of interconnection of a Renewable Energy Generating Facility shall be allocated in the manner set forth below under "Interconnection Costs." Each of the Company and the Renewable Energy Generator shall disclose to the other, within 6 weeks of a request by the other, any and all data, relating to the electric system of the

Company or the Renewable Energy Generating Facility of the Renewable Energy Generator, necessary to plan and execute such interconnection in conformity with such technical requirements.

A Renewable Energy Generating Facility shall be designed to operate in parallel with the Company's electric system without adversely affecting the operations of its customers and without presenting safety hazards to personnel of the Company or its customers. The Renewable Energy Generator shall furnish, install, operate and maintain facilities such as relays, switches, synchronizing equipment, monitoring equipment and control and protective devices designated by the Company and specified in the standard Schedule FIT Agreement ("Schedule FIT Agreement") as suitable for parallel operation with the electric system of the Company. The Renewable Energy Generating Facility and systems interconnecting the Renewable Energy Generating Facility with the Company's electric system must be in compliance with all applicable safety and performance standards of the National Electric Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), and the Company's requirements for distributed generation or storage interconnected with the Company's electric system as provided in the Company's Rules, and subject to any other requirements, including payments, as provided in the Schedule FIT Agreement.

Applications to interconnect a Renewable Energy Generating Facility in parallel with the Company's electric system will be processed in accordance with the queuing procedures in Appendix II.

## Interconnection Features, Standards and Allocation of Costs

Features and standards of interconnection and allocation of costs of interconnection shall be as follows for each Renewable Energy Generating Facility that is interconnected to the electric system of the Company under this Schedule:

	Tier 1	Tier 2	Tier 3
-	El	ectrical Capacity (	kW)
In-Line Hydropower Generating Facility Located on Oahu	≤ 20 kW	> 20 kW and ≤ 100 kW	> 100 kW and ≤ 5000 kW
Photovoltaic Generating Facility Located on Oahu	≤ 20 kW	> 20 kW and ≤ 500 kW	> 500 kW and ≤ 5000 kW
Concentrating Solar Power Generating Facility Located on Oahu	≤ 20 kW	> 20 kW and ≤ 500 kW	> 500 kW and ≤ 5000 kW
Onshore Wind	≤ 20 kW	> 20 kW and	> 100 kW and

Generating Facility Located on Oanu		≤ 100 kW	≤ 5000 kW
	Intercon	nection Features a	nd Standards
Voltage Regulation	None	None	Yes
Frequency Regulation	None	None	Yes
SCADA	None	None	Yes
	Alloca	ition of Interconne	ction Costs
Interconnection Requirements Study (IRS) Costs	Company	Company	Renewable Energy Generator
System and feeder studies and technology verification studies performed by the utility	Company	Company	Company
Project risk assessment costs including costs associated with curtailment studies	Company	Company	50% Company; 50% Renewable Energy Generator
Line extension and transformation equipment specific to the facility	Renewable Energy Generator	Renewable Energy Generator	Renewable Energy Generator
Substation specific to the facility	Company	Company	Company
Equipment installed at the customer site specific to the facility	Renewable Energy Generator	Renewable Energy Generator	Renewable Energy Generator
SCADA, control system, and curtailment system specific to the facility	Company	Company	Renewable Energy Generator
Utility system costs and upgrades	Company	Company	Company

## Schedule FIT Agreement:

The Company shall offer a Schedule FIT Agreement, in the form provided in Appendix I, to any Renewable Energy Generator that applies for interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule.

In the case of a Renewable Energy Generating Facility that is not compensated for curtailment, each such Schedule FIT Agreement shall oblige the Company to purchase and pay for all Renewable Energy generated by the Renewable Energy Generating Facility and delivered to the electric system of the Company at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule, and shall oblige the Renewable Energy Generator to sell and deliver all Renewable Energy generated by the Renewable Energy Generating Facility, in excess of any electricity consumed by the Renewable Energy Generating Facility, to the Company, for the entire term of the Schedule FIT Agreement.

In the case of a Renewable Energy Generating Facility that is compensated for curtailment, each such Schedule FIT Agreement shall oblige the Company to purchase and pay for all Renewable Energy generated by the Renewable Energy Generating Facility and delivered to the electric system of the Company, and all Renewable Energy that would be generated by a Renewable Energy Generating Facility and delivered to the electric system of the Company but for curtailment by the Company of such generation or delivery, at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule, and shall oblige the Renewable Energy Generator to sell and deliver all Renewable Energy generated by the Renewable Energy Generating Facility, in excess of any electricity consumed by the Renewable Energy Generating Facility, to the Company, for the entire term of the Schedule FIT Agreement.

Each such Schedule FIT Agreement shall oblige the Company to purchase and pay for all such Renewable Energy at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule. The Company shall compensate the Renewable Energy Generator for such Renewable Energy in an amount no less than the number of kilowatt-hours of such Renewable Energy multiplied by such rate of compensation.

A Renewable Energy Generator that owns a Renewable Energy Generating Facility having an Electrical Capacity greater than 20 kilowatts shall be obliged to provide at least 3 months' advance to the Company and the Commission prior to ceasing operation of the Renewable Energy Generating Facility for reasons other than *force majeure* events. Any such Renewable Energy Generator that fails to provide such notice shall be subject to penalty.

Procedures for applying for and executing a Schedule FIT Agreement are provided in Appendix II to this Schedule.

## Rights and Obligations Following Term of Schedule FIT Agreement

During a period commencing 6 months prior to the conclusion of the term of a Schedule FIT Agreement and ending upon the conclusion of such term, the Renewable Energy Generator that is a party to such Schedule FIT Agreement shall be obliged to offer to sell electricity

generated by the Renewable Energy Generating Facility to the Company on an annual basis at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule as in effect upon the conclusion of such term for such Renewable Energy Generating Facility. If the Company does not accept such offer during such period, the Renewable Energy Generator shall have the right to sell such electricity at any rate of compensation to any person, or to sell such electricity at the PURPA avoided-cost rate to the Company if the Renewable Energy Generator is eligible to do so.

## Metering; Instrumentation:

The Company, at its expense, shall install a meter to record the flow of Renewable Energy delivered to the electric system of the Company. The Renewable Energy Generator shall, at its expense, provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the premises of the Renewable Energy Generating Facility in accordance with the Company's Rules.

The Renewable Energy Generator, at its expense, shall install instrumentation for measuring the amount of hydrological flow, solar radiation, wind velocity and/or Baseline Energy source, as the case may be, at or immediately near the point of contact with the Renewable Energy Generating Facility.

Any energy delivered to a Renewable Energy Generator by the Company will be metered separately from any Renewable Energy delivered by the Renewable Energy Generator to the Company, either by use of multiple meters or a meter capable of separately recording the net inflow and outflow of electricity.

#### Purchase of Renewable Energy

The Company shall pay for each kilowatt-hour ("kWh") of Renewable Energy as follows.

	Renewable Energy Source:	In-line Hydropower	
In-Line Hydropower Generating Facility		Feed-in Tari	ff Rate (¢/kWh)
	Located on Oahu <u>Electrical Capacity (kW)</u>	Compensated	Not Compensated
		for Curtailment	for Curtailment
Tier 1	≤ 20 kW	13.20	to be determined
Tier 2	$> 20 \text{ kW} \text{ and } \le 100 \text{ kW}$	7.06	to be determined
Tier 3	$> 100 \text{ kW} \text{ and } \le 5000 \text{ kW}$	to be determined	to be determined

	Renewable Energy Source	: Solar Radiation	
Photo	voltaic Generating Facility  Located on Oahu	Feed-in Tarif	f Rate (¢/kWh)
<u>E</u> l	ectrical Capacity (kW)	Compensated for	Not Compensated
		Curtailment	for Curtailment
Tier 1	≤20 kW	25.4	to be determined
Tier 2	$> 20 \text{ kW} \text{ and } \le 500 \text{ kW}$	22.74	to be determined
Tier 3	$> 500 \text{ kW} \text{ and } \le 5000 \text{ kW}$	to be determined	to be determined

	Renewable Energy Source	e: Solar Radiation	
Concentrating Solar Power Facility	Feed-in Tariff Rate (¢/kWh)		
Located on Oahu Electrical Capacity (kW)		Compensated for Curtailment	Not Compensated for Curtailment
Tier 1	≤ 20 kW	47.70	to be determined
Tier 2	$> 20 \text{ kW} \text{ and } \leq 500 \text{ kW}$	48.35	to be determined
Tier 3	> 500 kW and ≤ 5000 kW	to be determined	to be determined

	Renewable Energy S	Source: Wind	
Onshore Wind Generating Facility	<u>Feed-in Tariff</u>	Rate (¢/kWh)	
Ele	Located on Oahu Electrical Capacity (kW)		Not Compensated for Curtailment
Tier 1	≤ 20 kW	33.4	to be determined
Tier 2	> 20 kW and ≤ 100 kW	24.8	to be determined
Tier 3	> 100 kW and ≤ 5000 kW	to be determined	to be determined

	Renewable Energy Source	: Baseline Energy	
Base	Baseline Generating Facility	Feed-in Tariff	f Rate (¢/kWh)
<u>El</u>	Located on Oahu Electrical Capacity (kW)		Not Compensated for Curtailment
Tier I	≤ 20 kW	13.20	to be determined
Tier 2	> 20 kW and ≤ 100 kW	7.06	to be determined
Tier 3	> 100 kW and ≤ 250 kW	to be determined	to be determined
Tier 3	> 250 kW and ≤ 500 kW	to be determined	to be determined
Tier 3	> 500 kW and ≤ 5000 kW	to be determined	to be determined

The Commission shall periodically adjust the Schedule FIT feed-in tariff rates of compensation in accordance with the procedures provided in Appendix III of this Schedule. The Renewable Energy Generator shall receive the feed-in tariff rate of compensation in effect at the time of execution of the Schedule FIT Agreement for the entire term of the Schedule FIT Agreement.

#### Term of Schedule FIT Agreement:

The term of the Schedule FIT Agreement shall be as follows, commencing on the initial delivery of Renewable Energy under the Schedule FIT Agreement from the Renewable Energy Generator to the Company:

Renewable Energy Source	Term of Agreement
In-Line Hydropower	20 years
Solar Radiation	20 years
Wind	20 years
Baseline Energy	20 years

#### Net Energy Metering

A Renewable Energy Generator that currently has a net energy metering agreement with the Company, or that is eligible to enter into a net energy metering agreement with the Company, shall have a one-time choice of either (1) entering into a net energy metering agreement with the Company, or (2) entering into a Schedule FIT Agreement with the Company.

#### Schedule Q

The Company shall have no obligation to offer a Schedule FIT Agreement to a Renewable Energy Generator that currently has a power purchase agreement with the Company providing for the purchase of energy by the Company at a rate specified under Schedule Q.

## Aggregate System Caps

The obligations of the Company to interconnect a Renewable Energy Generating Facility having an Electrical Capacity of less than 20 kilowatts to the Company's electric system, and to offer an Schedule FIT Agreement to a Renewable Energy Generator that applies for interconnection of such Renewable Energy Generating Facility to the electric system of the Company under this Schedule, shall not apply with respect to a Renewable Energy Generator that applies for interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule after the time at which the Company has received applications for interconnection of Renewable Energy Generating Facilities, each having an Electrical Capacity of less than 20 kilowatts, and having an aggregate Electrical Capacity that equals or exceeds .25 per cent of the 2008 peak demand for such electrical system.

The obligations of the Company to interconnect a Renewable Energy Generating Facility having an Electrical Capacity of 20 kilowatts or more to the Company's electric system, and to offer an Schedule FIT Agreement to a Renewable Energy Generator that applies for interconnection of such Renewable Energy Generating Facility to the electric system of the Company under this Schedule, shall not apply with respect to a Renewable Energy Generator that applies for interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule after the time at which the Company has received applications for interconnection of Renewable Energy Generating Facilities, each having an

Electrical Capacity of 20 kilowatts or more, and having an aggregate Electrical Capacity that equals or exceeds 4.75 per cent of the 2008 peak demand for such electrical system.

## Queuing Procedures:

Applications to interconnect a Renewable Energy Generating Facility in parallel with the Company's electric system will be processed in accordance with the queuing procedures in Appendix II.

An independent third party shall oversee the queuing process for Renewable Energy Generating Facilities eligible for feed-in tariff rates of compensation under this Schedule. The independent third party shall assist in developing the queuing process, and inform parties of the queue length and their status in the queue. The independent third party shall also monitor how the Company administers the queue.

## Renewable Energy Certificates:

Any certificate, credit, allowance, green tag, or other transferable indicia or environmental attribute, verifying the generation of a particular quantity of energy from a Renewable Energy Source, indicating the generation of a specific quantity of Renewable Energy by a Renewable Energy Generating Facility, or indicating a Renewable Energy Generator's ownership of any environmental attribute associated with such generation, is the property of, and shall inure to the benefit of, the Company for the benefit of ratepayers.

## Reporting Requirements of the Company

The Company shall file, on a calendar year basis, an annual report that contains the following information on the status of its performance of its obligations under this Schedule:

- (a) Number of project applications received by island, by resource type, by project size, and interconnection process (Rule 14H or IRS at sub-transmission level).
- (b) Number and status of projects currently in the queue by island, by resource type, and by project size.
- (c) Number of projects completed, interconnected, and contract signed by island, by resource type, and by project size.
- (d) Total kilowatt-hours purchased through FITs during the calendar year by island, by project, and by project size.
- (e) Total amount in dollars of the power purchased through FITs during the calendar year by island, by project, and by project size.
- (f) Number and duration of curtailments and the reason for each curtailment during the year by island and by project.

(g) Program administration information such as the time spent to complete processing a project application from date of receipt of contract application to interconnecting the project in the system – by island, by resource type, and by project size.

## Reporting Requirements of the Renewable Energy Generator

Each Renewable Energy Generator that owns a Renewable Energy Generating Facility having an Electrical Capacity greater than 20 kilowatts shall file, within 30 days of the placement in service of such Renewable Energy Generating Facility, in the Commission's FIT docket, subject to protective order, a report that contains the following information on such Renewable Energy Generating Facility:

- (a) The cost of project design, permitting, and construction costs, including labor and materials costs;
- (b) Financing or capital cost;
- (c) Land cost or actual cost of site acquisition;
- (d) Interconnection and metering costs incurred by the Renewable Energy Generator;
- (e) Other project costs incurred in developing and constructing the project;
- (f) Tax credits, rebates, incentives received and applied to the development cost of the project;
- (g) Maintenance and operation labor and non-labor costs;
- (h) Fuel supply costs (for biomass and biogas projects);
- (i) Monthly land or site leases; and
- (j) Other operations and maintenance costs.

Each such Renewable Energy Generator also shall file, no later than January 31 of each year, an annual report with the Commission in the FIT docket, that contains the following information with respect to such Renewable Energy Generating Facility:

- (a) annual electricity production in kWh; and
- (b) annual operating costs, including operations and maintenance costs, lease expenses, insurance, and property taxes.

#### SCHEDULE FIT

## Feed-in Tariff – Purchases from Renewable Energy Generators

#### Definitions:

For the purposes of this Schedule:

- "Baseline Energy" means energy generated or produced from wind, sun, falling water, biogas (including landfill and sewage-based digester gas), geothermal, ocean water, currents, and waves, including ocean thermal energy conversion, biomass (including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste), and hydrogen produced from renewable resources, other than Renewable Energy generated by a Photovoltaic Generating Facility, a Concentrating Solar Power Facility, an Onshore Wind Generating Facility or an In-line Hydropower Generating Facility.
- "Baseline Generating Facility" means a Renewable Energy Generating Facility that generates electricity from Baseline Energy.
- (3) "Commission" means the State of Hawaii Public Utilities Commission.
- (4) "Company" means Hawaii Electric Light Company, Inc.
- (5) "Concentrating Solar Power Facility" means a Renewable Energy Generating Facility that generates electricity by concentrating solar radiation to heat a working fluid that drives a generator.
- (6) "Electrical Capacity" means the installed maximum nameplate alternating-current electricity generating capacity, in kilowatts, of a Renewable Energy Generating Facility.
- (7) "FIT Reliability Standards" means standards developed and adopted by the Company, and approved by the Commission, that establish when an additional Renewable Energy Generating Facility can or cannot be interconnected with the Company's electric system on an island or region therein without markedly increasing curtailment of existing or new Renewable Energy Generating Facilities, including the Company's existing standards contained in the Company's tariff Rule 14H.
- (8) "In-Line Hydropower" means hydroelectric generation that utilizes energy from a water pipeline system that is designed primarily to serve another functional purpose where a section of pipeline is replaced with a turbine-generator section.

- (9) "In-Line Hydropower Generating Facility" means a Renewable Energy Generating Facility that generates electricity from In-Line Hydropower.
- (10) "Onshore Wind Generating Facility" means any Wind Generating Facility that is not located in an ocean water depth of 20 meters or more.
- (11) "Photovoltaic Generating Facility" means a Renewable Energy Generating Facility that uses photovoltaic material to generate electricity from solar radiation.
- "Renewable Energy Generating Facility" means any identifiable facility, plant, installation, project, equipment, apparatus, or the like, located in the State of Hawaii, placed in service after the effective date of this Schedule, and that generates Renewable Energy from a Renewable Energy Source.
- (13) "Renewable Energy Generator" means any person that owns, controls, operates, manages, or uses a Renewable Energy Generating Facility to generate Renewable Energy from a Renewable Energy Source.
- (14) "Renewable Energy Source" means the following sources of energy:
  - (a) In-Line Hydropower;
  - (b) solar radiation;
  - (c) wind;
  - (d) Baseline Energy.
- (15) "Renewable Energy" means electricity generated by a Renewable Energy Generating Facility from a Renewable Energy Source.
- (16) "Wind Generating Facility" means a Renewable Energy Generating Facility that generates electricity from wind.

#### Interconnection

Upon the application of a Renewable Energy Generator that places a Renewable Energy Generating Facility in service, the Company shall interconnect such Renewable Energy Generating Facility to the electric system of the Company, provided that technical requirements set forth in the Company's FIT Reliability Standards, as approved by the Commission, are met. If the Company decides, after performing an interconnection requirements study ("IRS"), that such Renewable Energy Generating Facility does not meet such technical requirements, the Company shall file a detailed report with the Commission explaining the reasons why such Renewable Energy Generating Facility does not meet such technical requirements.

Costs incurred to meet technical requirements of interconnection of a Renewable Energy Generating Facility shall be allocated in the manner set forth below under "Interconnection Costs." Each of the Company and the Renewable Energy Generator shall disclose to the other, within 6 weeks of a request by the other, any and all data, relating to the electric system of the

Company or the Renewable Energy Generating Facility of the Renewable Energy Generator, necessary to plan and execute such interconnection in conformity with such technical requirements.

A Renewable Energy Generating Facility shall be designed to operate in parallel with the Company's electric system without adversely affecting the operations of its customers and without presenting safety hazards to personnel of the Company or its customers. The Renewable Energy Generator shall furnish, install, operate and maintain facilities such as relays, switches, synchronizing equipment, monitoring equipment and control and protective devices designated by the Company and specified in the standard Schedule FIT Agreement ("Schedule FIT Agreement") as suitable for parallel operation with the electric system of the Company. The Renewable Energy Generating Facility and systems interconnecting the Renewable Energy Generating Facility with the Company's electric system must be in compliance with all applicable safety and performance standards of the National Electric Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), and the Company's requirements for distributed generation or storage interconnected with the Company's electric system as provided in the Company's Rules, and subject to any other requirements, including payments, as provided in the Schedule FIT Agreement.

Applications to interconnect a Renewable Energy Generating Facility in parallel with the Company's electric system will be processed in accordance with the queuing procedures in Appendix II.

## Interconnection Features, Standards and Allocation of Costs

Features and standards of interconnection and allocation of costs of interconnection shall be as follows for each Renewable Energy Generating Facility that is interconnected to the electric system of the Company under this Schedule:

	Tier 1	Tier 2	Tier 3
	E	lectrical Capacity (	kW)
In-Line Hydropower Generating Facility Located on Hawaii	≤ 20 kW	> 20 kW and ≤ 100 kW	> 100 kW and ≤ 2720 kW
Photovoltaic Generating Facility Located on Hawaii	≤20 kW	> 20 kW and ≤ 250 kW	> 250 kW and ≤ 2720 kW
Concentrating Solar Power Generating Facility Located on Hawaii	≤ 20 kW	> 20 kW and ≤ 500 kW	> 500 kW and ≤ 2720 kW
Onshore Wind Generating Facility	≤20 kW	> 20 kW and ≤ 100 kW	None

HAWAII ELECTRIC LIGHT COMPANY, INC.

Located on Hawaii			
	Intercon	nection Features	and Standards
Voltage Regulation	None	None	Yes
Frequency Regulation	None	None	Yes
SCADA	None	None	Yes
	Alloca	ntion of Interconn	ection Costs
Interconnection Requirements Study (IRS) Costs	Company	Company	Renewable Energy Generator
System and feeder studies and technology verification studies performed by the utility	Company	Company	Company
Project risk assessment costs including costs associated with curtailment studies	Company	Company	50% Company; 50% Renewable Energy Generator
Line extension and transformation equipment specific to the facility	Renewable Energy Generator	Renewable Energy Generator	Renewable Energy Generator
Substation specific to the facility	Company	Company	Company
Equipment installed at the customer site specific to the facility	Renewable Energy Generator	Renewable Energy Generator	Renewable Energy Generator
SCADA, control system, and curtailment system specific to the facility	Company	Company	Renewable Energy Generator
Utility system costs and upgrades	Company	Company	Company

#### Schedule FIT Agreement:

The Company shall offer a Schedule FIT Agreement, in the form provided in Appendix I, to any Renewable Energy Generator that applies for interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule.

In the case of a Renewable Energy Generating Facility that is not compensated for curtailment, each such Schedule FIT Agreement shall oblige the Company to purchase and pay for all Renewable Energy generated by the Renewable Energy Generating Facility and delivered to the electric system of the Company at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule, and shall oblige the Renewable Energy Generator to sell and deliver all Renewable Energy generated by the Renewable Energy Generating Facility, in excess of any electricity consumed by the Renewable Energy Generating Facility, to the Company, for the entire term of the Schedule FIT Agreement.

In the case of a Renewable Energy Generating Facility that is compensated for curtailment, each such Schedule FIT Agreement shall oblige the Company to purchase and pay for all Renewable Energy generated by the Renewable Energy Generating Facility and delivered to the electric system of the Company, and all Renewable Energy that would be generated by a Renewable Energy Generating Facility and delivered to the electric system of the Company but for curtailment by the Company of such generation or delivery, at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule, and shall oblige the Renewable Energy Generator to sell and deliver all Renewable Energy generated by the Renewable Energy Generating Facility, in excess of any electricity consumed by the Renewable Energy Generating Facility, to the Company, for the entire term of the Schedule FIT Agreement.

Each such Schedule FIT Agreement shall oblige the Company to purchase and pay for all such Renewable Energy at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule. The Company shall compensate the Renewable Energy Generator for such Renewable Energy in an amount no less than the number of kilowatt-hours of such Renewable Energy multiplied by such rate of compensation.

A Renewable Energy Generator that owns a Renewable Energy Generating Facility having an Electrical Capacity greater than 20 kilowatts shall be obliged to provide at least 3 months' advance to the Company and the Commission prior to ceasing operation of the Renewable Energy Generating Facility for reasons other than *force majeure* events. Any such Renewable Energy Generator that fails to provide such notice shall be subject to penalty.

Procedures for applying for and executing a Schedule FIT Agreement are provided in Appendix II to this Schedule.

## Rights and Obligations Following Term of Schedule FIT Agreement

During a period commencing 6 months prior to the conclusion of the term of a Schedule FIT Agreement and ending upon the conclusion of such term, the Renewable Energy Generator that is a party to such Schedule FIT Agreement shall be obliged to offer to sell electricity

HAWAII ELECTRIC LIGHT COMPANY, INC.

generated by the Renewable Energy Generating Facility to the Company on an annual basis at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule as in effect upon the conclusion of such term for such Renewable Energy Generating Facility. If the Company does not accept such offer during such period, the Renewable Energy Generator shall have the right to sell such electricity at any rate of compensation to any person, or to sell such electricity at the PURPA avoided-cost rate to the Company if the Renewable Energy Generator is eligible to do so.

## Metering; Instrumentation:

The Company, at its expense, shall install a meter to record the flow of Renewable Energy delivered to the electric system of the Company. The Renewable Energy Generator shall, at its expense, provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the premises of the Renewable Energy Generating Facility in accordance with the Company's Rules.

The Renewable Energy Generator, at its expense, shall install instrumentation for measuring the amount of hydrological flow, solar radiation, wind velocity and/or Baseline Energy source, as the case may be, at or immediately near the point of contact with the Renewable Energy Generating Facility.

Any energy delivered to a Renewable Energy Generator by the Company will be metered separately from any Renewable Energy delivered by the Renewable Energy Generator to the Company, either by use of multiple meters or a meter capable of separately recording the net inflow and outflow of electricity.

## Purchase of Renewable Energy

The Company shall pay for each kilowatt-hour ("kWh") of Renewable Energy as follows.

	Renewable Energy Source: In-line Hydropower				
	In-Line Hydropower Generating Facility  Located on Hawaii		Feed-in Tariff Rate (¢/kWh)		
1	ectrical Capacity (kW)	Compensated for Curtailment	Not Compensated for Curtailment		
Tier 1	≤ 20 kW	13.20	to be determined		
Tier 2	$> 20 \text{ kW} \text{ and } \le 100 \text{ kW}$	7.06	to be determined		
Tier 3	$> 100 \text{ kW} \text{ and } \le 2720 \text{ kW}$	to be determined	to be determined		

Renewable Energy Source: Solar Radiation				
Photovoltaic Generating Facility Located on Hawaii		Feed-in Tarif	Feed-in Tariff Rate (¢/kWh)	
Ele	ectrical Capacity (kW)	Compensated for Curtailment	Not Compensated for Curtailment	
Tier 1	≤ 20 kW	25.4	to be determined	
Tier 2	$> 20 \text{ kW} \text{ and } \le 250 \text{ kW}$	22.74	to be determined	
Tier 3	$> 250 \text{ kW} \text{ and } \le 2720 \text{ kW}$	to be determined	to be determined	

	Renewable Energy Source: Solar Radiation				
	Concentrating Solar Power Facility Feed-in Tariff F		Rate (¢/kWh)		
	Located on Hawaii ectrical Capacity (kW)	Compensated for Curtailment	Not Compensated for Curtailment		
Tier 1	≤20 kW	47.70	to be determined		
Tier 2	> 20 kW and ≤ 500 kW	48.35	to be determined		
Tier 3	$> 500 \text{ kW} \text{ and } \le 2720 \text{ kW}$	to be determined	to be determined		

Renewable Energy Source: Wind			
Onshore Wind Generating Facility Located on Hawaii		Feed-in Tariff Rate (¢/kWh)	
	etrical Capacity (kW)	Compensated for Curtailment	Not Compensated for Curtailment
Tier 1	≤ 20 kW	33.4	to be determined
Tier 2	> 20 kW and ≤ 100 kW	24.8	to be determined

	Renewable Energy Source	: Baseline Energy	
Baseline Generating Facility		Feed-in Tarif	f Rate (¢/kWh)
<u>El</u>	Located on Hawaii ectrical Capacity (kW)	Compensated for Curtailment	Not Compensated for Curtailment
Tier 1	≤ 20 kW	13.20	to be determined
Tier 2	$> 20 \text{ kW} \text{ and } \leq 100 \text{ kW}$	7.06	to be determined
Tier 3	> 100 kW and ≤ 250 kW	to be determined	to be determined
Tier 3	> 250 kW and ≤ 500 kW	to be determined	to be determined
Tier 3	$> 500 \text{ kW} \text{ and } \le 2720 \text{ kW}$	to be determined	to be determined

The Commission shall periodically adjust the Schedule FIT feed-in tariff rates of compensation in accordance with the procedures provided in Appendix III of this Schedule. The Renewable Energy Generator shall receive the feed-in tariff rate of compensation in effect at the time of execution of the Schedule FIT Agreement for the entire term of the Schedule FIT Agreement.

## Term of Schedule FIT Agreement:

The term of the Schedule FIT Agreement shall be as follows, commencing on the initial delivery of Renewable Energy under the Schedule FIT Agreement from the Renewable Energy Generator to the Company:

Renewable Energy Source	Term of Agreement
In-Line Hydropower	20 years
Solar Radiation	20 years
Wind	20 years
Baseline Energy	20 years

#### Net Energy Metering

A Renewable Energy Generator that currently has a net energy metering agreement with the Company, or that is eligible to enter into a net energy metering agreement with the Company, shall have a one-time choice of either (1) entering into a net energy metering agreement with the Company, or (2) entering into a Schedule FIT Agreement with the Company.

#### Schedule Q

The Company shall have no obligation to offer a Schedule FIT Agreement to a Renewable Energy Generator that currently has a power purchase agreement with the Company providing for the purchase of energy by the Company at a rate specified under Schedule Q.

## Aggregate System Caps

The obligations of the Company to interconnect a Renewable Energy Generating Facility having an Electrical Capacity of less than 20 kilowatts to the Company's electric system, and to offer an Schedule FIT Agreement to a Renewable Energy Generator that applies for interconnection of such Renewable Energy Generating Facility to the electric system of the Company under this Schedule, shall not apply with respect to a Renewable Energy Generator that applies for interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule after the time at which the Company has received applications for interconnection of Renewable Energy Generating Facilities, each having an Electrical Capacity of less than 20 kilowatts, and having an aggregate Electrical Capacity that equals or exceeds .25 per cent of the 2008 peak demand for such electrical system.

The obligations of the Company to interconnect a Renewable Energy Generating Facility having an Electrical Capacity of 20 kilowatts or more to the Company's electric system, and to offer an Schedule FIT Agreement to a Renewable Energy Generator that applies for interconnection of such Renewable Energy Generating Facility to the electric system of the Company under this Schedule, shall not apply with respect to a Renewable Energy Generator that applies for interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule after the time at which the Company has received applications for interconnection of Renewable Energy Generating Facilities, each having an

HAWAII ELECTRIC LIGHT COMPANY, INC.

Electrical Capacity of 20 kilowatts or more, and having an aggregate Electrical Capacity that equals or exceeds 4.75 per cent of the 2008 peak demand for such electrical system.

## **Queuing Procedures:**

Applications to interconnect a Renewable Energy Generating Facility in parallel with the Company's electric system will be processed in accordance with the queuing procedures in Appendix II.

An independent third party shall oversee the queuing process for Renewable Energy Generating Facilities eligible for feed-in tariff rates of compensation under this Schedule. The independent third party shall assist in developing the queuing process, and inform parties of the queue length and their status in the queue. The independent third party shall also monitor how the Company administers the queue.

## Renewable Energy Certificates:

Any certificate, credit, allowance, green tag, or other transferable indicia or environmental attribute, verifying the generation of a particular quantity of energy from a Renewable Energy Source, indicating the generation of a specific quantity of Renewable Energy by a Renewable Energy Generating Facility, or indicating a Renewable Energy Generator's ownership of any environmental attribute associated with such generation, is the property of, and shall inure to the benefit of, the Company for the benefit of ratepayers.

## Reporting Requirements of the Company

The Company shall file, on a calendar year basis, an annual report that contains the following information on the status of its performance of its obligations under this Schedule:

- (a) Number of project applications received by island, by resource type, by project size, and interconnection process (Rule 14H or IRS at sub-transmission level).
- (b) Number and status of projects currently in the queue by island, by resource type, and by project size.
- (c) Number of projects completed, interconnected, and contract signed by island, by resource type, and by project size.
- (d) Total kilowatt-hours purchased through FITs during the calendar year by island, by project, and by project size.
- (e) Total amount in dollars of the power purchased through FITs during the calendar year by island, by project, and by project size.
- (f) Number and duration of curtailments and the reason for each curtailment during the year by island and by project.

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(g) Program administration information such as the time spent to complete processing a project application from date of receipt of contract application to interconnecting the project in the system – by island, by resource type, and by project size.

## Reporting Requirements of the Renewable Energy Generator

Each Renewable Energy Generator that owns a Renewable Energy Generating Facility having an Electrical Capacity greater than 20 kilowatts shall file, within 30 days of the placement in service of such Renewable Energy Generating Facility, in the Commission's FIT docket, subject to protective order, a report that contains the following information on such Renewable Energy Generating Facility:

- (a) The cost of project design, permitting, and construction costs, including labor and materials costs;
- (b) Financing or capital cost;
- (c) Land cost or actual cost of site acquisition;
- (d) Interconnection and metering costs incurred by the Renewable Energy Generator;
- (e) Other project costs incurred in developing and constructing the project;
- (f) Tax credits, rebates, incentives received and applied to the development cost of the project;
- (g) Maintenance and operation labor and non-labor costs;
- (h) Fuel supply costs (for biomass and biogas projects):
- (i) Monthly land or site leases; and
- (i) Other operations and maintenance costs.

Each such Renewable Energy Generator also shall file, no later than January 31 of each year, an annual report with the Commission in the FIT docket, that contains the following information with respect to such Renewable Energy Generating Facility:

- (a) annual electricity production in kWh; and
- (b) annual operating costs, including operations and maintenance costs, lease expenses, insurance, and property taxes.

#### SCHEDULE FIT

## Feed-in Tariff – Purchases from Renewable Energy Generators

#### Definitions:

For the purposes of this Schedule:

- (1) "Baseline Energy" means energy generated or produced from wind, sun, falling water, biogas (including landfill and sewage-based digester gas), geothermal, ocean water, currents, and waves, including ocean thermal energy conversion, biomass (including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste), and hydrogen produced from renewable resources, other than Renewable Energy generated by a Photovoltaic Generating Facility, a Concentrating Solar Power Facility, an Onshore Wind Generating Facility or an In-line Hydropower Generating Facility.
- (2) "Baseline Generating Facility" means a Renewable Energy Generating Facility that generates electricity from Baseline Energy.
- (3) "Commission" means the State of Hawaii Public Utilities Commission.
- (4) "Company" means Maui Electric Company, Limited.
- (5) "Concentrating Solar Power Facility" means a Renewable Energy Generating Facility that generates electricity by concentrating solar radiation to heat a working fluid that drives a generator.
- (6) "Electrical Capacity" means the installed maximum nameplate alternating-current electricity generating capacity, in kilowatts, of a Renewable Energy Generating Facility.
- (7) "FIT Reliability Standards" means standards developed and adopted by the Company, and approved by the Commission, that establish when an additional Renewable Energy Generating Facility can or cannot be interconnected with the Company's electric system on an island or region therein without markedly increasing curtailment of existing or new Renewable Energy Generating Facilities, including the Company's existing standards contained in the Company's tariff Rule 14H.
- (8) "In-Line Hydropower" means hydroelectric generation that utilizes energy from a water pipeline system that is designed primarily to serve another functional purpose where a section of pipeline is replaced with a turbine-generator section.

- (9) "In-Line Hydropower Generating Facility" means a Renewable Energy Generating Facility that generates electricity from In-Line Hydropower.
- (10) "Onshore Wind Generating Facility" means any Wind Generating Facility that is not located in an ocean water depth of 20 meters or more.
- (11) "Photovoltaic Generating Facility" means a Renewable Energy Generating Facility that uses photovoltaic material to generate electricity from solar radiation.
- "Renewable Energy Generating Facility" means any identifiable facility, plant, installation, project, equipment, apparatus, or the like, located in the State of Hawaii, placed in service after the effective date of this Schedule, and that generates Renewable Energy from a Renewable Energy Source.
- "Renewable Energy Generator" means any person that owns, controls, operates, manages, or uses a Renewable Energy Generating Facility to generate Renewable Energy from a Renewable Energy Source.
- (14) "Renewable Energy Source" means the following sources of energy:
  - (a) In-Line Hydropower;
  - (b) solar radiation;
  - (c) wind:
  - (d) Baseline Energy.
- (15) "Renewable Energy" means electricity generated by a Renewable Energy Generating Facility from a Renewable Energy Source.
- (16) "Wind Generating Facility" means a Renewable Energy Generating Facility that generates electricity from wind.

#### Interconnection

Upon the application of a Renewable Energy Generator that places a Renewable Energy Generating Facility in service, the Company shall interconnect such Renewable Energy Generating Facility to the electric system of the Company, provided that technical requirements set forth in the Company's FIT Reliability Standards, as approved by the Commission, are met. If the Company decides, after performing an interconnection requirements study ("IRS"), that such Renewable Energy Generating Facility does not meet such technical requirements, the Company shall file a detailed report with the Commission explaining the reasons why such Renewable Energy Generating Facility does not meet such technical requirements.

Costs incurred to meet technical requirements of interconnection of a Renewable Energy Generating Facility shall be allocated in the manner set forth below under "Interconnection Costs." Each of the Company and the Renewable Energy Generator shall disclose to the other, within 6 weeks of a request by the other, any and all data, relating to the electric system of the

Company or the Renewable Energy Generating Facility of the Renewable Energy Generator, necessary to plan and execute such interconnection in conformity with such technical requirements.

A Renewable Energy Generating Facility shall be designed to operate in parallel with the Company's electric system without adversely affecting the operations of its customers and without presenting safety hazards to personnel of the Company or its customers. The Renewable Energy Generator shall furnish, install, operate and maintain facilities such as relays, switches, synchronizing equipment, monitoring equipment and control and protective devices designated by the Company and specified in the standard Schedule FIT Agreement ("Schedule FIT Agreement") as suitable for parallel operation with the electric system of the Company. The Renewable Energy Generating Facility and systems interconnecting the Renewable Energy Generating Facility with the Company's electric system must be in compliance with all applicable safety and performance standards of the National Electric Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), and the Company's requirements for distributed generation or storage interconnected with the Company's electric system as provided in the Company's Rules, and subject to any other requirements, including payments, as provided in the Schedule FIT Agreement.

Applications to interconnect a Renewable Energy Generating Facility in parallel with the Company's electric system will be processed in accordance with the queuing procedures in Appendix II.

## Interconnection Features, Standards and Allocation of Costs

Features and standards of interconnection and allocation of costs of interconnection shall be as follows for each Renewable Energy Generating Facility that is interconnected to the electric system of the Company under this Schedule:

	Tier 1	Tier 2	Tier 3
	E	lectrical Capacity (	kW)
In-Line Hydropower Generating Facility Located on Maui	≤ 20 kW	> 20 kW and ≤ 100 kW	> 100 kW and ≤ 2720 kW
Photovoltaic Generating Facility Located on Maui	≤20 kW	> 20 kW and ≤ 250 kW	> 250 kW and ≤ 2720 kW
Concentrating Solar Power Generating Facility Located on Maui	≤ 20 kW	> 20 kW and ≤ 500 kW	> 500 kW and ≤ 2720 kW
Onshore Wind	≤ 20 kW	> 20 kW and	None

Generating Facility		≤ 100 kW	<u> </u>
Located on Maui		2 100 KW	
In-Line Hydropower	≤ 20 kW	> 20 kW and	None
Generating Facility Located		≤ 100 kW	
on Lanai or Molokai			
Photovoltaic Generating	≤ 20 kW	> 20 kW and	None
Facility Located on Lanai or		≤ 100 kW	
Molokai			
Concentrating Solar Power	≤ 20 kW	> 20 kW and	None
Generating Facility Located		≤ 100 kW	
on Lanai or Molokai			
Onshore Wind Generating	≤ 20 kW	> 20 kW and	None
Facility Located on Lanai or		≤ 100 kW	
Molokai			
<del></del>	Intercon	nection Features an	d Standards
Voltage Regulation	None	None	Yes
Frequency Regulation	None	None	Yes
SCADA	None	None	Yes
	Alloca	tion of Interconnec	tion Costs
Interconnection	Company	Company	Renewable
Requirements Study			Energy
(IRS) Costs			Generator
System and feeder studies	Company	Company	Company
and technology verification	3}	7	
studies performed by the			
utility			
Project risk assessment costs	Company	Company	50% Company;
including costs associated			50% Renewable
with curtailment studies			Energy
<u> </u>	D	D 11	Generator
Line extension and	Renewable	Renewable	Renewable
transformation equipment	Energy	Energy	Energy
specific to the facility	Generator	Generator	Generator
DAATTI I	FI FOTDIO COL	IPANY LIMITED	1

Substation specific to the facility	Company	Company	Company
Equipment installed at the customer site specific to the facility	Renewable Energy Generator	Renewable Energy Generator	Renewable Energy Generator
SCADA, control system, and curtailment system specific to the facility	Company	Company	Renewable Energy Generator
Utility system costs and upgrades	Company	Company	Company

#### Schedule FIT Agreement:

The Company shall offer a Schedule FIT Agreement, in the form provided in Appendix I, to any Renewable Energy Generator that applies for interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule.

In the case of a Renewable Energy Generating Facility that is not compensated for curtailment, each such Schedule FIT Agreement shall oblige the Company to purchase and pay for all Renewable Energy generated by the Renewable Energy Generating Facility and delivered to the electric system of the Company at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule, and shall oblige the Renewable Energy Generator to sell and deliver all Renewable Energy generated by the Renewable Energy Generating Facility, in excess of any electricity consumed by the Renewable Energy Generating Facility, to the Company, for the entire term of the Schedule FIT Agreement.

In the case of a Renewable Energy Generating Facility that is compensated for curtailment, each such Schedule FIT Agreement shall oblige the Company to purchase and pay for all Renewable Energy generated by the Renewable Energy Generating Facility and delivered to the electric system of the Company, and all Renewable Energy that would be generated by a Renewable Energy Generating Facility and delivered to the electric system of the Company but for curtailment by the Company of such generation or delivery, at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule, and shall oblige the Renewable Energy Generator to sell and deliver all Renewable Energy generated by the Renewable Energy Generating Facility, in excess of any electricity consumed by the Renewable Energy Generating Facility, to the Company, for the entire term of the Schedule FIT Agreement.

Each such Schedule FIT Agreement shall oblige the Company to purchase and pay for all such Renewable Energy at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule. The Company shall compensate the Renewable Energy Generator for such Renewable Energy in an amount no less than the number of kilowatt-hours of such Renewable Energy multiplied by such rate of compensation.

A Renewable Energy Generator that owns a Renewable Energy Generating Facility having an Electrical Capacity greater than 20 kilowatts shall be obliged to provide at least 3 months' advance to the Company and the Commission prior to ceasing operation of the Renewable Energy Generating Facility for reasons other than *force majeure* events. Any such Renewable Energy Generator that fails to provide such notice shall be subject to penalty.

Procedures for applying for and executing a Schedule FIT Agreement are provided in Appendix II to this Schedule.

#### Rights and Obligations Following Term of Schedule FIT Agreement

During a period commencing 6 months prior to the conclusion of the term of a Schedule FIT Agreement and ending upon the conclusion of such term, the Renewable Energy Generator that is a party to such Schedule FIT Agreement shall be obliged to offer to sell electricity generated by the Renewable Energy Generating Facility to the Company on an annual basis at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule as in effect upon the conclusion of such term for such Renewable Energy Generating Facility. If the Company does not accept such offer during such period, the Renewable Energy Generator shall have the right to sell such electricity at any rate of compensation to any person, or to sell such electricity at the PURPA avoided-cost rate to the Company if the Renewable Energy Generator is eligible to do so.

## Metering; Instrumentation:

The Company, at its expense, shall install a meter to record the flow of Renewable Energy delivered to the electric system of the Company. The Renewable Energy Generator shall, at its expense, provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the premises of the Renewable Energy Generating Facility in accordance with the Company's Rules.

The Renewable Energy Generator, at its expense, shall install instrumentation for measuring the amount of hydrological flow, solar radiation, wind velocity and/or Baseline Energy source, as the case may be, at or immediately near the point of contact with the Renewable Energy Generating Facility.

Any energy delivered to a Renewable Energy Generator by the Company will be metered separately from any Renewable Energy delivered by the Renewable Energy Generator to the Company, either by use of multiple meters or a meter capable of separately recording the net inflow and outflow of electricity.

#### Purchase of Renewable Energy

The Company shall pay for each kilowatt-hour ("kWh") of Renewable Energy as follows.

	Renewable Energy Source: In-line Hydropower				
In-Line Hy	In-Line Hydropower Generating Facility  Located on Maui		ff Rate (¢/kWh)		
<u>El</u>	ectrical Capacity (kW)	Compensated for Curtailment	Not Compensated for Curtailment		
Tier 1	≤ 20 kW	13.20	to be determined		
Tier 2	> 20 kW and ≤ 100 kW	7.06	to be determined		
Tier 3	> 100 kW and ≤ 2720 kW	to be determined	to be determined		

	Renewable Energy Source: In-line Hydropower				
	In-Line Hydropower Generating Facility		Feed-in Tariff Rate (¢/kWh)		
	ed on Lanai or Molokai ectrical Capacity (kW)	Compensated for Curtailment	Not Compensated for Curtailment		
Tier 1	≤ 20 kW	13.20	to be determined		
Tier 2	> 20 kW and ≤ 100 kW	7.06	to be determined		

	Renewable Energy Source	: Solar Radiation	
Photovoltaic Generating Facility		Feed-in Tarif	Rate (¢/kWh)
<u>Ele</u>	Located on Maui ectrical Capacity (kW)	Compensated for Curtailment	Not Compensated for Curtailment
Tier 1	≤20 kW	25.40	to be determined
Tier 2	> 20 kW and ≤ 250 kW	22.74	to be determined
Tier 3	> 250 kW and ≤ 2720 kW	to be determined	to be determined

	Renewable Energy Sour	ce: Solar Radiation		
	Photovoltaic Generating Facility Located on Lanai or Molokai Electrical Capacity (kW)		Feed-in Tariff Rate (¢/kWh)	
			Not Compensated for Curtailment	
Tier 1	≤ 20 kW	25.40	to be determined	
Tier 2	> 20 kW and ≤ 100 kW	22.74	to be determined	

	Renewable Energy Source: Solar Radiation			
Concent	Concentrating Solar Power Facility  Located on Maui  Electrical Capacity (kW)		Rate (¢/kWh)	
<u>Ele</u>			Not Compensated for Curtailment	
Tier 1	≤ 20 kW	47.7	to be determined	
Tier 2	> 20 kW and ≤ 500 kW	48.35	to be determined	
Tier 3	> 500 kW and ≤ 2720 kW	to be determined	to be determined	

Renewable Energy Source: Solar Radiation			
Concentrating Solar Power Facility Located on Lanai or Molokai Electrical Capacity (kW)		Feed-in Tariff Rate (¢/kWh)	
		Compensated for Curtailment	Not Compensated for Curtailment
Tier 1	≤ 20 kW	47.70	to be determined
Tier 2	$> 20 \text{ kW} \text{ and } \le 100 \text{ kW}$	48.35	to be determined

Renewable Energy Source: Wind			
Onshore Wind Generating Facility		Feed-in Tariff Rate (¢/kWh)	
	Located on Maui, Lanai or Molokai <u>Electrical Capacity (kW)</u>		Not Compensated for Curtailment
Tier 1	≤ 20 kW	33.4	to be determined
Tier 2	$> 20 \text{ kW} \text{ and } \leq 100 \text{ kW}$	24.8	to be determined

	Renewable Energy Source	Baseline Energy	
Baseline Generating Facility		Feed-in Tariff	Rate (¢/kWh)
<u> </u>	Located on Maui <u>Electrical Capacity (kW)</u>		Not Compensated for Curtailment
Tier 1	≤ 20 kW	13.20	to be determined
Tier 2	> 20 kW and ≤ 100 kW	7.06	to be determined
Tier 3	> 100 kW and ≤ 250 kW	to be determined	to be determined
Tier 3	> 250  kW and $≤ 500  kW$	to be determined	to be determined
Tier 3	> 500 kW and ≤ 2720 kW	to be determined	to be determined

Renewable Energy Source: Baseline Energy			
Baseline Generating Facility Located on Lanai or Molokai Electrical Capacity (kW)		Feed-in Tariff Rate (¢/kWh)	
		Compensated for Curtailment	Not Compensated for Curtailment
Tier 1	≤ 20 kW	13.20	to be determined
Tier 2	$> 20 \text{ kW} \text{ and } \leq 100 \text{ kW}$	7.06	to be determined

The Commission shall periodically adjust the Schedule FIT feed-in tariff rates of compensation in accordance with the procedures provided in Appendix III of this Schedule. The Renewable Energy Generator shall receive the feed-in tariff rate of compensation in effect at the time of execution of the Schedule FIT Agreement for the entire term of the Schedule FIT Agreement.

## Term of Schedule FIT Agreement:

The term of the Schedule FIT Agreement shall be as follows, commencing on the initial delivery of Renewable Energy under the Schedule FIT Agreement from the Renewable Energy Generator to the Company:

Renewable Energy Source	Term of Agreement
In-Line Hydropower	20 years
Solar Radiation	20 years
Wind	20 years
Baseline Energy	20 years

#### Net Energy Metering

A Renewable Energy Generator that currently has a net energy metering agreement with the Company, or that is eligible to enter into a net energy metering agreement with the Company, shall have a one-time choice of either (1) entering into a net energy metering agreement with the Company, or (2) entering into a Schedule FIT Agreement with the Company.

#### Schedule Q

The Company shall have no obligation to offer a Schedule FIT Agreement to a Renewable Energy Generator that currently has a power purchase agreement with the Company providing for the purchase of energy by the Company at a rate specified under Schedule Q.

## Aggregate System Caps

The obligations of the Company to interconnect a Renewable Energy Generating Facility having an Electrical Capacity of less than 20 kilowatts to the Company's electric system, and to offer an Schedule FIT Agreement to a Renewable Energy Generator that applies for interconnection of such Renewable Energy Generating Facility to the electric system of the Company under this Schedule, shall not apply with respect to a Renewable Energy Generator that applies for interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule after the time at which the Company has received applications for interconnection of Renewable Energy Generating Facilities, each having an Electrical Capacity of less than 20 kilowatts, and having an aggregate Electrical Capacity that equals or exceeds .25 per cent of the 2008 peak demand for such electrical system.

The obligations of the Company to interconnect a Renewable Energy Generating Facility having an Electrical Capacity of 20 kilowatts or more to the Company's electric system, and to offer an Schedule FIT Agreement to a Renewable Energy Generator that applies for interconnection of such Renewable Energy Generating Facility to the electric system of the Company under this Schedule, shall not apply with respect to a Renewable Energy Generator that applies for interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule after the time at which the Company has received applications for interconnection of Renewable Energy Generating Facilities, each having an Electrical Capacity of 20 kilowatts or more, and having an aggregate Electrical Capacity that equals or exceeds 4.75 per cent of the 2008 peak demand for such electrical system.

#### Oueuing Procedures:

Applications to interconnect a Renewable Energy Generating Facility in parallel with the Company's electric system will be processed in accordance with the queuing procedures in Appendix II.

An independent third party shall oversee the queuing process for Renewable Energy Generating Facilities eligible for feed-in tariff rates of compensation under this Schedule. The independent third party shall assist in developing the queuing process, and inform parties of the queue length and their status in the queue. The independent third party shall also monitor how the Company administers the queue.

## Renewable Energy Certificates:

Any certificate, credit, allowance, green tag, or other transferable indicia or environmental attribute, verifying the generation of a particular quantity of energy from a Renewable Energy Source, indicating the generation of a specific quantity of Renewable Energy by a Renewable Energy Generating Facility, or indicating a Renewable Energy Generator's ownership of any environmental attribute associated with such generation, is the property of, and shall inure to the benefit of, the Company for the benefit of ratepayers.

## Reporting Requirements of the Company

The Company shall file, on a calendar year basis, an annual report that contains the following information on the status of its performance of its obligations under this Schedule:

- (a) Number of project applications received by island, by resource type, by project size, and interconnection process (Rule 14H or IRS at sub-transmission level).
- (b) Number and status of projects currently in the queue by island, by resource type, and by project size.
- (c) Number of projects completed, interconnected, and contract signed by island, by resource type, and by project size.
- (d) Total kilowatt-hours purchased through FITs during the calendar year by island, by project, and by project size.
- (e) Total amount in dollars of the power purchased through FITs during the calendar year by island, by project, and by project size.
- (f) Number and duration of curtailments and the reason for each curtailment during the year by island and by project.
- (g) Program administration information such as the time spent to complete processing a project application from date of receipt of contract application to

interconnecting the project in the system – by island, by resource type, and by project size.

## Reporting Requirements of the Renewable Energy Generator

Each Renewable Energy Generator that owns a Renewable Energy Generating Facility having an Electrical Capacity greater than 20 kilowatts shall file, within 30 days of the placement in service of such Renewable Energy Generating Facility, in the Commission's FIT docket, subject to protective order, a report that contains the following information on such Renewable Energy Generating Facility:

- (a) The cost of project design, permitting, and construction costs, including labor and materials costs;
- (b) Financing or capital cost;
- (c) Land cost or actual cost of site acquisition;
- (d) Interconnection and metering costs incurred by the Renewable Energy Generator;
- (e) Other project costs incurred in developing and constructing the project;
- (f) Tax credits, rebates, incentives received and applied to the development cost of the project;
- (g) Maintenance and operation labor and non-labor costs;
- (h) Fuel supply costs (for biomass and biogas projects);
- (i) Monthly land or site leases; and
- (i) Other operations and maintenance costs.

Each such Renewable Energy Generator also shall file, no later than January 31 of each year, an annual report with the Commission in the FIT docket, that contains the following information with respect to such Renewable Energy Generating Facility:

- (a) annual electricity production in kWh; and
- (b) annual operating costs, including operations and maintenance costs, lease expenses, insurance, and property taxes.

## STANDARD SCHEDULE FIT TIER 1 AND TIER 2 AGREEMENT

This Standard Schedule FIT Tier I and Tier 2 Agr , and entered into by and between	reement ("Agreement") is made on
("Seller") and	("Company"), sometimes also
referred to herein jointly as "Parties" or individually as "I	Party."
This Agreement is applicable only to sellers who	own, operate, manage, control and/or use a
Renewable Energy Generating Facility ("Facility") as set	forth in the Company's Schedule FIT relating
to Feed-in Tariff purchases from renewable energy generation	ators, and only to the Facility described and
installed at the following location:	

This Agreement provides for (1) Seller's interconnection and operation of the Facility in parallel with the Company's distribution system ("System"), and (2) the Company's purchase of and payment for (a) all electrical energy generated by the Facility and delivered to the Company's System at the point of interconnection ("Point of Interconnection"), and (b) all electrical energy that would have been generated by the Facility and delivered to the Company's System at the Point of Interconnection, but for curtailment by the Company of such generation and/or delivery.

In consideration of the premises and the respective promises herein, the Company and the Seller hereby agree as follows:

- 1. <u>Interconnection</u>: The Company shall interconnect the Facility for operation in parallel with the Company's System in accordance with Schedule FIT and the Company's rules filed with the Hawaii Public Utilities Commission, and not by this Agreement.
- 2. Purchase of Energy by the Company; Billing and Payment:
  - (a) The Company shall purchase from the Seller and pay the Seller for all electrical energy generated by the Facility and delivered to the Company's System at the Point of Interconnection and all electrical energy that would have been generated by the Facility and delivered to the Company's System at the Point of Interconnection, but for curtailment by the Company of such generation and/or delivery, pursuant to the terms and conditions of the applicable Schedule FIT rate schedule and Appendix C attached hereto commencing from the initial delivery of energy under this Agreement to the Company's System (the "Commercial Operation Date").
  - (b) The amount of energy that would have been generated generated by the Facility and delivered to the Company's System at the Point of Interconnection, but for curtailment by the Company of such generation and/or delivery shall be calculated by: (i) measuring the amount of hydrological flow, solar radiation, wind velocity or baseline energy source, as the case may be, at or immediately near the point of contact with the Facility during periods of curtailment and periods of non-curtailment, (ii) measuring the amount of energy generated by the Facility during periods of non-curtailment, (iii) determining the

arithmetic relationship between the measured amounts of hydrological flow, solar radiation, wind velocity or baseline energy source, as the case may be, during periods of non-curtailment and the measured amounts of energy generated by the Facility during periods of non-curtailment, and (iv) using such arithmetic relationship to calculate the amount of energy that would have been generated by the Facility during periods of curtailment based on such measured amounts of hydrological flow, solar radiation, wind velocity or baseline energy source, as the case may be, during periods of curtailment.

- (c) Seller shall sell all electricity generated by the Facility, in excess of any energy consumed by the Facility, to the Company for the entire term of this Agreement. Seller shall not sell such electricity to third parties or attempt to renegotiate the terms and conditions of this Agreement during the FIT Term.
- (d) Seller shall render an invoice to the Company for energy purchased, and the Company shall pay to Seller the amount stated in such invoice, including any State of Hawaii general excise tax or use tax thereon, no later than 20 days after the date of such invoice.
- 3. <u>Purchase of Energy by the Company from the Seller</u>: Purchases of energy by the Company from the Seller shall be governed by the applicable Schedule FIT rate schedule and the Company's rules filed with the Hawaii Public Utilities Commission ("Commission") and not by this Agreement.
- 4. <u>Interconnection</u>: A Seller that applies, pursuant to Schedule FIT, to interconnect a Facility for operation in parallel with Company's System shall execute the FIT Standard Interconnection Agreement attached as Appendix B to this Agreement and shall comply at all times with the provisions of Appendix I to Rule 14 H (Distributed Generating Facility Interconnection Standards and Technical Requirements) prior to operating the Facility in parallel with the Company's System. Nothing in this provision shall affect the Company's right to refuse or discontinue service as provided in the Company's Tariff Rules 7.A.1 and 2. An application by a Seller to interconnect a Facility for operation in parallel with the Company's electric system under the Schedule FIT will be processed in accordance with the procedures for queuing approved by the Commission.
- 5. Personnel and System Safety: Notwithstanding any other provisions of this Agreement or the Appendices thereto, if at any time the Company determines that the continued operation of the Seller's Facility may endanger any person or property, the Company's electric system or have an adverse effect on the safety of the Company's other customers, the Company shall have the right to disconnect Seller's Facility from the Company's electric system. The Seller's Facility shall remain disconnected until such time as the Company is satisfied that the endangering condition(s) has been corrected.
- 6. <u>Metering; Instrumentation</u>: The Company will supply, own, and maintain all necessary meters and associated equipment utilized for billing and energy purchase. The meters will be tested and read in accordance with the Commission's and Company's rules. The Seller shall supply, at no expense to the Company, a suitable location for meters and associated equipment used for billing and energy purchase, in accordance with the Company's tariff.

The Seller will supply instrumentation for measuring the amount of hydrological flow, solar radiation, wind velocity or baseline energy source, as the case may be, at or immediately near the point of contact with the Facility. Such instrumentation shall be owned and maintained by the Seller or a third party engaged by the Seller. The Company may have such instrumentation tested at any time by a Commission-approved third-party testing authority to verify the accuracy of such measurements within a maximum range of error of  $\pm$  \_\_\_\_\_\_%. If the measurements are within the maximum range of error, the Company shall pay the costs of such testing. If such measurements exceed the maximum range of error, the Seller shall pay the costs of testing and refund to the Company any overpayments to the extent of any mis-measurements accruing during the interval between the current testing and the next most recent testing of the instrumentation.

7. <u>Term</u>: Except as otherwise provided herein, this Agreement shall become effective upon execution by the two parties ("Execution Date") and shall remain in effect for a term of twenty years ("FIT Term").

During a period commencing 6 months prior to the conclusion of the FIT Term and ending upon the conclusion of such FIT Term, the Seller shall be obliged to offer to sell electricity generated by the Facility to the Company on an annual basis at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in the Schedule FIT as in effect upon the conclusion of such FIT Term. If the Company does not accept such offer during such period, the Seller shall have the right to sell such electricity at any rate of compensation to any person, or to sell such electricity at the PURPA avoided-cost rate to the Company if the Seller is eligible to do so.

- 8. <u>Termination for Cause</u>: (a) The Company shall have the right to terminate this Agreement if, during the FIT Term:
  - (1) The Seller, by act or omission, materially breaches or defaults on any material covenant, condition or other provision of this Agreement, and fails to cure such breach or default within thirty (30) days after written notice of such breach or default from the Company, unless (i) such breach or default is due to Force Majeure, provided, however, that if the Seller does not cure such breach or default resulting from Force Majeure within 180 days of such notice, the Company may terminate this Agreement; or, (ii) such breach or default cannot be cured within thirty (30) days and the Seller is making diligent efforts to cure such breach or default, provided, however, that if such breach or default is not cured within 180 days of such notice, the Company may terminate this Agreement; or
  - (2) The Seller abandons the construction or operation of the Facility.
- (b) Before terminating this Agreement for cause, the Company shall give written notice to the Seller of the existence of one or more of the above conditions allowing termination for cause and of the Company's intention to exercise its termination rights if the condition is not corrected to the satisfaction of Company. Upon receipt of the Company's notice of intent to terminate for cause, the Seller shall have thirty (30) days in which to correct the noted condition to the satisfaction of the Company.

- (c) The Seller may terminate the Agreement if the Company, by act or omission, materially breaches or defaults on any material covenant, condition or other provision of this Agreement, and fails to cure such breach or default within thirty (30) days after written notice of such breach or default from the Seller, unless (i) such breach or default is due to Force Majeure, provided, however, that if the Company does not cure such breach or default within 180 days of such notice, the Seller may terminate this Agreement; or, (ii) such breach or default cannot be cured within thirty (30) days and the Company is making diligent efforts to cure such breach or default, provided, however, that if such breach or default is not cured within 180 days of such notice, the Seller may terminate this Agreement. A Tier 2 Seller shall be obliged to provide at least 3 months' advance to the Company and the Commission prior to ceasing operation of the Facility for reasons other than Force Majeure events. Any such Seller that fails to provide such notice shall be subject to penalties to be determined and approved by the Commission.
- 9. <u>Indemnification</u>: (a) The Seller shall indemnify, defend and hold harmless the Company and its directors, officers, employees and agents (including but not limited to affiliates and contractors and their employees) from and against any and all liabilities, damages, losses, penalties, claims, demands, suits, costs, expenses (including attorneys' fees), and proceedings of every kind, including those for damage to the property or real property of any person or entity (including the Seller) and/or for injury to or death of any person (including the Seller's employees and agents)(collectively "Injury or Damage"), directly or indirectly arising out of or attributable to or in any manner connected with the engineering, design, location, construction, maintenance, interconnection, or parallel operation of the Seller's Facility with the Company's System, and/or directly or indirectly arising out of or attributable to or in any manner connected with the breach of any of Seller's representations or warranties herein, except to the extent that such Injury or Damage is attributable to the gross negligence or willful misconduct of the Company.
- (b) The Company shall indemnify, defend and hold harmless the Seller and its directors, officers, employees and agents (including but not limited to affiliates and contractors and their employees) from and against any and all liabilities, damages, losses, penalties, claims, demands, suits, costs, expenses (including attorneys' fees), and proceedings of every kind, including those for damage to the property or real property of any person or entity (including the Company) and/or for injury to or death of any person (including the Company's employees and agents)(collectively "Injury or Damage"), directly or indirectly arising out of or attributable to or in any manner connected with the engineering, design, location, construction, maintenance, interconnection, or parallel operation of the Company's System with the Seller's Facility, and/or directly or indirectly arising out of or attributable to or in any manner connected with the breach of any of the Company's representations or warranties herein, except to the extent that such Injury or Damage is attributable to the gross negligence or willful misconduct of the Seller.
- (c) Nothing in this Agreement shall create any duty to, any standard of care with reference to, or any liability to any person not a party to it.
- 10. <u>Insurance</u>: The Seller shall, at its own expense and during the term of the Agreement and any other time that the Seller's facility is interconnected with the Company's System, maintain in effect with a responsible insurance company authorized to do insurance business in Hawaii, the following insurance

that will protect the Seller and the Company with respect to the Seller's Facility, the Seller's operations, and the Seller's interconnection with the Company's System:

- Tier 1: A commercial general liability policy covering bodily injury and property damage combined single limit of at least FIVE HUNDRED THOUSAND DOLLARS (\$500,000) for any occurrence.
- Tier 2: A commercial general liability policy covering bodily injury and property damage combined single limit of at least TWO MILLION DOLLARS (\$2,000,000) for any occurrence.

The Seller has responsibility to determine if higher limits are desired and purchased. Said insurance shall name the Company as an additional insured, shall include contractual liability coverage for written contracts and agreements including this Agreement, and shall be non-cancelable and non-alterable without thirty (30) days' prior written notice to the Company. "Claims made" policies are not acceptable. The insurance required hereunder shall provide that it is primary with respect to the Seller and the Company. The Seller shall provide evidence of such insurance, including insurer's acknowledgement that coverage applies with respect to this Agreement, by providing certificates of insurance to the Company within 30 days of any change. Initially, certificates of insurance must be provided to the Company prior to executing this Agreement and any parallel interconnection. The Seller's indemnity and other obligations shall not be limited by the foregoing insurance requirements. Any deductible shall be the responsibility of the Seller.

- 11. <u>Assignment</u>: This Agreement may not be assigned by either the Company or the Seller absent the written consent of the other party. Such consent shall not be unreasonably withheld.
- 12. <u>Hawaii Public Utilities Commission</u>: This Agreement shall, at all times, be subject to such changes or modifications by the Commission as said Commission, may, from time to time, direct in the exercise of its jurisdiction.
- 13. Force Majeure: (a) If either party shall be wholly or partially prevented from performing any of its obligations under this Agreement by reason of or through strikes, lightning, rain, earthquake, wind, riots, fire, flood, invasion, insurrection, lava flow or volcanic activity, tidal wave, civil commotion, the order of any court, judge or civil authority, war, any act of God or the public enemy, or any other similar or dissimilar cause reasonably beyond its exclusive control and not attributable to its neglect, then and in any such event, either party shall be excused from whatever performance is prevented by such event to the extent so prevented, and either party shall not be liable for any damage or loss resulting therefrom.
- (b) Force Majeure does not include:
  - (i) any acts or omissions of any third party, including, without limitation, any vendor, materialman, customer, or supplier of Seller, unless such acts or omissions are themselves excused by reason of Force Majeure;

- (ii) any full or partial curtailment in the electric output of the Seller's Facility that is caused by or arises from a mechanical or equipment breakdown or other mishap or events or conditions attributable to normal wear and tear or flaws, unless such mishap is caused by Force Majeure;
- (iii) Seller's inability to obtain Permits or approvals of any type for the construction, operation, or maintenance of Seller's Facility;
- (iv) litigation or administrative or judicial action pertaining to this Agreement, the Site, the Facility, the acquisition, maintenance or renewal of financing or any Permits, or the design, construction, maintenance or operation of the Facility or the Company's System;
- (v) any full or partial curtailment in the delivery of the output of the Seller or of the ability of the Company to accept output from the Seller which is caused by any third party including, without limitation, any vendor or supplier of the Seller or the Company, except to the extent due to Force Majeure.
- 14. <u>Warranties</u>: (a) The Seller represents and warrants as follows:
  - (i) The Seller has all necessary right, power and authority to execute, deliver and perform this Agreement.
  - (ii) The execution, delivery and performance of this Agreement by the Seller will not result in a willful violation of any law or regulation of any governmental authority, or conflict with, or result in a breach of, or cause a default under, any agreement or instrument to which the Seller is a party or by which it is bound.
- (b) The Company represents and warrants as follows:
  - (i) The Company has all necessary right, power and authority to execute, deliver and perform this Agreement.
  - (ii) The execution, delivery and performance of this Agreement by the Company will not result in a willful violation of any law or regulation of any governmental authority, or conflict with, or result in a breach of, or cause a default under, any agreement or instrument to which the Company is a party or by which it is bound.

# 15. <u>Dispute Resolution</u>:

Before submitting any claims, controversies or disputes ("<u>Dispute(s)</u>") under this Agreement to the Dispute Resolution Procedure set forth herein, the presidents, vice presidents, or authorized delegates from both Seller and Company having full authority to settle the Dispute(s), shall personally meet in Hawaii and attempt in good faith to resolve the Dispute(s) (the "Management Meeting").

(a) <u>Arbitration</u>. If any Disputes remain unresolved after such Management Meeting concludes, the parties agree to submit any such Dispute(s) to binding arbitration in Honolulu, Hawaii pursuant to the

administration by, and in accordance with the Arbitration Rules, Procedures, and Protocols of, Dispute Prevention & Resolution, Inc. then in effect ("Arbitration Rules"). Capitalized and otherwise undefined terms in this Section 15 shall have the meanings set forth in the Arbitration Rules. The award of the arbitrator(s) is binding upon the parties and judgment upon the award rendered may be entered in any court of competent jurisdiction. In the event that Dispute Prevention & Resolution, Inc. or its successor is unable or unwilling to administer the arbitration at the time the dispute is submitted for binding arbitration, the parties agree to submit any such Dispute(s) to binding arbitration in Honolulu, Hawaii pursuant to the administration by, and in according with the Commercial Arbitration Rules of the American Arbitration Association. All references herein to the "Arbitration Rules" shall then be deemed to be references to the Commercial Arbitration Rules or the provisions thereof most similar to the referenced provision of the Arbitration Rules.

- (b) <u>Procedures for Appointing Arbitrator(s)</u>. The parties hereby agree that arbitrator(s) shall be appointed according to the following procedure, notwithstanding any contrary or inconsistent provision of the Arbitration Rules.
  - (1) <u>Single Arbitrator</u>. Within 20 calendar days of the initiation of arbitration and the receipt by Respondent of the Demand for Arbitration, the parties shall attempt to agree on a single arbitrator.
  - (2) Three-Arbitrator Panel. Should the parties fail to agree on a single arbitrator within that 20-calendar day period, each party may appoint one arbitrator within 14 calendar days thereafter pursuant to the Arbitration Rules. If any party does not appoint an arbitrator within that 14-calendar day period, Dispute Prevention & Resolution, Inc. shall appoint one or both of the arbitrator(s), as appropriate. Within 20 calendar days of the appointment of the second arbitrator, the two appointed arbitrators shall attempt to agree upon the appointment of a third arbitrator. If the two appointed arbitrators fail to agree upon the appointment of the third arbitrator within this 20-calendar day period, Dispute Prevention & Resolution, Inc. shall appoint the third arbitrator.
- (c) Authority of the Arbitrator(s)s. Notwithstanding anything herein or in the Arbitration Rules to the contrary, all documents shall be produced and all depositions shall be taken in Honolulu, Hawaii, and that any deposition fees and travel expenses of all hearing witnesses and deponents named by, affiliated with or formerly affiliated with a party or any of its affiliates, or its affiliate's affiliate, shall be borne by that party. The parties warrant they shall cause such documents, witnesses and deponents to appear in Honolulu, Hawaii notwithstanding any objection as to the jurisdiction of the arbitration panel, the location of the arbitration, or lack of privity with a party or that the witness is not a party to the RAC or to the arbitration, and the arbitrator(s) shall have no power to order to the contrary. Notwithstanding anything herein or in the Arbitration Rules to the contrary, the authority of the arbitrator(s) in rendering the award is limited to the interpretation and/or application of the terms of this Agreement and to ordering any remedy allowed by this Agreement. The arbitrator(s) shall have no power to change any term or condition of this Agreement, deprive any party of a remedy expressly provided hereunder, or provide any right or remedy that has been excluded hereunder. Notwithstanding anything herein or in the Arbitration Rules to the contrary, any party who contends that the award was in excess of the authority of the arbitrator(s) as set forth herein may seek judicial relief in the Circuit Court of the State

of Hawaii for the circuit in which the arbitration hearing was held, provided that such judicial proceeding is initiated within 30 calendar days of the award and not otherwise.

(d) <u>No Punitive or Exemplary Damages</u>. Notwithstanding anything herein or in the Arbitration Rules to the contrary, and pursuant to Hawaii Revised Statutes § 658A-4, the parties hereby waive any and all claims for punitive or exemplary damages with respect to any and all Dispute(s).

# 17. Regulatory Compliance:

Tier 2 Sellers must file in Docket No. 2008-0273, subject to protective order, the following information for each FIT project, within thirty (30) days of the project entering service and annually thereafter.

- (a) The cost of project design, permitting, and construction costs, including labor and materials costs:
- (b) Financing or capital cost;
- (c) Land cost or actual cost of site acquisition;
- (d) Interconnection and metering costs incurred by the project developer;
- (e) Other project costs incurred in developing and constructing the project;
- (f) Tax credits, rebates, incentives received and applied to the project development cost;
- (g) Maintenance and operation labor and non-labor costs;
- (h) Fuel supply costs (for biomass and biogas projects);
- (i) Monthly land or site leases; and
- (i) Other operations and maintenance costs.

Additionally, Tier 2 Sellers must file an annual report with the Commission in Docket No. 2008-0273, no later than January 31, of each year, which contains the following information: (1) annual electricity production in kWh; and (2) annual operating costs, including operations and maintenance costs, lease expenses, insurance, and property taxes.

#### 17. Miscellaneous:

- (a) <u>Amendments</u>. Any amendment or modification of this Agreement or any part hereof shall not be valid unless in writing and signed by the parties. Any waiver hereunder shall not be valid unless in writing and signed by the party against whom waiver is asserted.
- (b) <u>Binding Effect</u>. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, legal representatives, and permitted assigns.
- (c) <u>Notices</u>. Any written notice provided hereunder shall be delivered personally or sent by registered or certified first class mail, with postage prepaid, to the other party at the following address:

Company:

	1)	By Mail:	
			_
		Attn:	_
	2) Deli		
			_
		Attn:	_
	3) By	acsimile:	
		(808)	_
	Seller:		
i	•	By Mail:	
	Attn:		
ii.		Delivered:	
	Δttn:		
		D. C	
iii.	•	By facsimile:	
	(808)	<del></del>	

Notice sent by mail shall be deemed to have been given on the date of actual delivery or at the expiration of the fifth day after the date of mailing, whichever is earlier. Any party hereto may

change its address for written notice by giving written notice of such change to the other party hereto.

Any notice delivered by facsimile must be followed by personal or mail delivery and the effective date of such notice shall be the date of personal delivery or, if by mail, the earlier of the actual date of delivery or the expiration of the fifth day after the date of mailing.

- (d) <u>Effect of Section and Appendix Headings</u>. The headings or titles of the several sections and appendices hereof are for convenience of reference and shall not affect the construction or interpretation of any provision of this Agreement.
- (e) <u>Non-Waiver</u>. No delay or forbearance of the Company or the Seller in the exercise of any remedy or right will constitute a waiver thereof, and the exercise or partial exercise of a remedy or right shall not preclude further exercise of the same or any other remedy or right.
- (f) Relationship of the Parties. Nothing in this Agreement shall be deemed to constitute either party hereto as partner, agent or representative of the other party or to create any fiduciary relationship between the parties. The Seller does <u>not</u> hereby dedicate any part of the Seller's Facility to serve the Company, the Company's customers or the public.
- (g) <u>Entire Agreement</u>. This Agreement, including the Definitions set forth in Appendix A, constitutes the entire understanding and agreement between the parties.
- (h) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Hawaii. The venue for a civil action related to this Agreement shall be the judicial circuit in which the Seller's Facility is located.
- (i) <u>Limitations</u>. Nothing in this Agreement shall limit the Company's ability to exercise its rights as specified in the Company's Tariff as filed with the Commission, or as specified in General Order No. 7 of the Commission's Standards for Electric Utility Service in the State of Hawaii, as either may be amended from time to time.
- (j) <u>Further Assurances</u>. Each of the parties shall from time to time and at all times do such further acts and deliver all such further documents and assurances as shall be reasonably necessary fully to perform and carry out this Agreement.
- (k) <u>Counterparts</u>. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same agreement.
- (l) <u>Definitions</u>. Terms used in this Agreement not otherwise defined in the context in which they first appear are defined in Appendix A to this Agreement.

- (m) Severability. If any term or provision of this Agreement, or the application thereof to any person, entity or circumstances is to any extent invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons, entities or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.
- (n) <u>Settlement of Disputes</u>. Except as otherwise expressly provided, any dispute or difference arising out of this Agreement or concerning the performance or the non-performance by either party of its obligations under this Agreement shall be determined in accordance with the dispute resolution procedures set forth in Section 15 of this Agreement.
- (o) Environmental Credits. To the extent not prohibited by law, any Environmental Credit shall be the property of the Company; provided, however, that such Environmental Credits shall be to the benefit of the Company's ratepayers in that the value must be credited "above the line". Seller shall use all reasonable efforts to ensure such Environmental Credits are vested in the Company, and shall execute all documents, including, but not limited to, documents transferring such Environmental Credits, without further compensation, provided, however, that the Company agrees to pay for reasonable costs associated with such efforts and/or documentation.
- (p) Appendices. Each Appendix is an essential and necessary part of this Agreement.
- (q) Patents. Seller agrees that in fulfilling its responsibilities under this Agreement, it will not use any process, program, design, device or material that infringes on any United States patent. Seller agrees to indemnify, defend and hold harmless the Company from and against all losses, damages, claims, fees and costs, including but not limited to reasonable attorneys' fees and costs, arising from or incidental to any suit or proceeding brought against the Company for patent infringement arising out of Seller's performance under this Agreement.
- (r) <u>Notice of Revisions of Schedule FIT</u>. The Company shall serve the Seller notice of any proposed revisions to its Schedule FIT that it files with the Commission within five (5) business days after the proposed revision is filed with the Commission.

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the latter of the two dates set forth below.

SELLER	COMPANY
Ву:	Ву:
Name:	Name:
Title:	Title:
Date:	Date:

By:	 	_	 		
Name:					
Title:					
Date:					

#### APPENDIX A

#### **DEFINITIONS**

Baseline Energy: energy generated or produced from wind, sun, falling water, biogas (including landfill and sewage-based digester gas), geothermal, ocean water, currents, and waves, including ocean thermal energy conversion, biomass (including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste), and hydrogen produced from renewable resources, other than Renewable Energy generated by a Photovoltaic Generating Facility, a Concentrating Solar Power Facility, an Onshore Wind Generating Facility or an In-line Hydropower Generating Facility.

Baseline Generating Facility: A Renewable Energy Generating Facility that generates electricity from Baseline Energy.

Commercial Operation Date: The date on which Seller's Facility first achieves Commercial Operations.

Company's System: The electric system owned and operated by the Company consisting of power plants, transmission and distribution lines, and related equipment for the production and delivery of electric power to the public.

Concentrating Solar Power Facility: A Renewable Energy Generating Facility that generates electricity by concentrating solar radiation to heat a working fluid that drives a generator.

Day: Means a calendar day.

Design Capacity: The installed maximum nameplate alternating-current electricity generating capacity, in kilowatts, of a Renewable Energy Generating Facility.

Environmental Credits: Any certificate, credit, allowance, green tag, or other transferable indicia or environmental attribute, verifying the generation of a particular quantity of energy from a Renewable Energy Source, indicating the generation of a specific quantity of Renewable Energy by a Renewable Energy Generating Facility, or indicating a Renewable Energy Generator's ownership of any environmental attribute associated with such generation. Such Environmental Credits shall include, but not be limited to, emissions credits, including credits triggered because such Facility does not produce carbon dioxide when generating electric energy, or any renewable energy credit, but in all cases shall not mean tax credits.

Execution Date: Shall have the meaning set forth in Section 7 of this Agreement.

Facility: Shall have the same meaning as Renewable Energy Generating Facility.

FIT Term: Shall have the meaning set forth in Section 7 of this Agreement.

Force Majeure: Shall have the meaning set forth in Section 14 of this Agreement.

In-Line Hydropower: Hydroelectric generation that utilizes energy from a water pipeline system that is designed primarily to serve another functional purpose where a section of pipeline is replaced with a turbine-generator section.

In-Line Hydropower Generating Facility: A Renewable Energy Generating Facility that generates electricity from In-Line Hydropower.

Onshore Wind Generating Facility: Any Wind Generating Facility that is not located in an ocean water depth of 20 meters or more.

Photovoltaic Generating Facility: A Renewable Energy Generating Facility that uses photovoltaic material to generate electricity from solar radiation.

Permits: All permits, licenses, approvals, certificates, entitlements and other authorizations issued by Governmental Authorities required for the construction, ownership and operation of the Facility, and all amendments, modifications, supplements, general conditions and addenda thereto.

Point of Interconnection: The point of delivery of energy supplied by Seller to Company where Seller's Facility interconnects with Company's System.

PUC (Public Utilities Commission): The Public Utilities Commission of the State of Hawaii.

Renewable Energy: Electricity generated by a Renewable Energy Generating Facility from a Renewable Energy Source.

Renewable Energy Generating Facility: Any identifiable facility, plant, installation, project, equipment, apparatus, or the like, located in the State of Hawaii, placed in service after the effective date of this Schedule, and that generates Renewable Energy from a Renewable Energy Source.

Renewable Energy Generator: any person that owns, controls, operates, manages, or uses a Renewable Energy Generating Facility to generate Renewable Energy from a Renewable Energy Source.

Renewable Energy Source: Any of the following sources of energy: (a) In-Line Hydropower; (b) solar radiation; (c) wind; or (d) Baseline Energy.

Site: The parcel of real property on which the Facility will be constructed and located, including any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of the Facility.

Term: The Term of this Contract is as defined in Section 7 of this Agreement.

Third Party: Any person or entity other than the Company or the Seller, and includes, but is not limited to, any subsidiary or affiliate of the Seller.

Wind Generating Facility: A Renewable Energy Generating Facility that generates electricity from wind.

#### APPENDIX B

# SCHEDULE FIT STANDARD INTERCONNECTION AGREEMENT

and		AGREEMENT ("Agreement") is made this day of, 20, by , hereinafter called the Seller.
gene and		REAS, the Seller owns, operates, controls, manages and/or uses a renewable energy cility ("Facility"), as identified in Exhibit A and defined in Section 3 of this Agreement;
Con		REAS, Seller desires to interconnect the Facility for operation in parallel with the estem upon the terms and conditions set forth herein.
Con		, THEREFORE, in consideration of the premises and the respective promises herein, the I the Seller hereby agree as follows:
1.	and th	Of Agreement: This Agreement relates solely to the conditions under which the Company he Seller agree that the Facility may be interconnected to the Company's system for tion in parallel with the Company's system.
2.		el Operation: The Facility may interconnect and operate in parallel with the Company's n in accordance with the terms and conditions of this Agreement.
3.	Facili	<u>ty</u> :
	(a)	For the purposes of this Agreement, the "Facility" is defined as the facility, plant, installation, project, equipment, apparatus, or the like, owned, operated, controlled, managed and/or used by the Seller, that generates Renewable Energy from a Renewable Energy Source and that is to be interconnected with the Company's system for operation

- in parallel with the Company's system.
- (b) The Seller shall furnish, install, operate and maintain, at its cost, the interconnection facilities (such as circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes) identified in Exhibit B hereto ("Facility Owned By The Seller").
- The point of interconnection is shown on the single-line diagram and three-line diagram (c) (provided by the Seller and reviewed by the Company) which are attached to Exhibit B (provided that the three-line diagram is not required if the Facility's capacity is less than 30 kW).

- (d) The Seller agrees to test the Facility, to maintain operating records, and to follow such operating procedures, as may be specified by the Company to protect the Company's system from damages resulting from the parallel operation of the Facility, including such testing, records and operating procedures as more fully described in Exhibit B attached hereto and made a part hereof.
- (e) The Company may inspect the Facility, as more fully described in Exhibit B.
- 4. <u>Interconnection Facilities Owned by the Company</u>: The Company agrees to furnish, install, operate and maintain such interconnection facilities on its side of the point of interconnection with the Facility as required for parallel operation with the Facility and as more fully described in Exhibit C attached hereto and made a part hereof ("Interconnection Facilities Owned By The Company"). All such interconnection facilities shall be the property of the Company. Where portions of the Company Interconnection Facilities are located on the Seller's premises, the Seller shall provide, at no expense to the Company, a suitable location for and access to all such equipment. If a 120/240 Volt power source or sources are required, the Seller shall provide these at no expense to the Company.
- 5. <u>Seller Payments</u>: The Seller agrees to pay to the Company a reasonable non-refundable contribution for the Company's investment in the interconnection facilities described in Exhibit C, subject to the terms and conditions included in Exhibit C. The interconnection costs will not include the cost of any technical screening of the impact of the Facility on the Company's system, any interconnection requirements study costs, any system and feeder studies and technology verification studies performed by the Company, any project risk assessment costs including costs associated with curtailment studies, any substation specific to the Facility, any SCADA, control system and/or curtailment system specific to the Facility, and any utility system costs and upgrades other than line extension and transformation equipment specific to the Facility, and equipment at the customer site specific to the Facility.
- 6. <u>Commencement of Producing Energy in Parallel</u>: After this Agreement is executed, and the Facility Owned By The Seller and the Interconnection Facilities Owned By The Company are completed, the Facility may be operated in parallel with the Company's system, provided that the Seller has satisfied the conditions in Section 3 of Exhibit B of this Agreement.

# 7. Disconnection of Facility for Utility Reasons:

(a) Upon providing reasonable notice (generally not to be less than ten (10) business days for scheduled work), the Company may require the Seller to temporarily disconnect the Facility from the Company's system when necessary for the Company to construct, install, maintain, repair, replace, remove, investigate, test or inspect any of its equipment or other Sellers' equipment or any part of its system. If the Company determines that such disconnection is necessary because of an unexpected system emergency, forced outage, operating conditions on its systems, or compliance with good engineering practices as determined by the Company, the Company will immediately attempt to notify the Seller

or the Seller's designated representatives in person, by telephone, by electronic mail, or by facsimile, of the need to disconnect the Facility. Unless the emergency condition requires immediate disconnection as determined by the Company, the Company shall allow sufficient time for the Seller to manually disconnect the Facility.

- (b) The Facility shall not energize a de-energized utility line under any circumstances, but may operate its Facility isolated from the utility system with an open tie point in accordance with Section 4.i of Appendix I to HECO Tariff Rule 14H.
- (c) Following the completion of work and/or rectification of the emergency conditions by the Company, the Company shall reset the Seller's service breaker, if open, as soon as practicable and shall provide, within fifteen (15) business days or such other period as is mutually agreed upon in writing by the Company and the Seller, written documentation of the occurrence and nature of the Company's work and/or emergency condition, and of the disconnection of the Facility.
- (d) The Company shall take reasonable steps to minimize the number and duration of such disconnections.
- (e) The disconnection of the Facility under this Section 8 shall not be subject to standby service charges under the Company's Schedule SS Standby Service tariff.
- (f) The Company may disconnect the Seller from the Company's system for failure by the Seller to disconnect the Facility under this Section 7, until such time that the Company's work or the system condition has been corrected and the normal system condition has been restored.
- 8. Personnel and System Safety: Notwithstanding any other provisions of this Agreement, the Company may disconnect the Facility from the Company's system, without prior notice to the Seller, (a) to eliminate conditions that constitute a potential hazard to the Company's personnel or the general public; (b) if pre-emergency or emergency conditions exist on the Company system; (c) if a hazardous condition relating to the Facility is observed by the Company's inspection; (d) if the Facility interferes with the Company's equipment or equipment belonging to other customers of the Company (including non-utility generating equipment); or (e) if the Seller of the Facility has tampered with any protective device. The Facility shall remain disconnected until such time as the Company is satisfied that the endangering condition(s) as listed above has been corrected, and the Company shall not be obligated to allow parallel operation of the Facility during such period. If the Company disconnects the Facility under this Section 8, it shall as soon as practicable notify the Seller in person, by telephone, by electronic mail, or by facsimile and provide the reason(s) why the Facility was disconnected from the Company's system. Following the rectification of the endangering conditions, the Company shall provide, within fifteen (15) business days or such other period as is mutually agreed upon in writing by the Company and the Seller, written documentation of the occurrence of the endangering conditions, and of the disconnection of the Facility. The disconnection of a Seller's

generating facility shall not be subject to standby service charges provided that the disconnection was caused by the utility or the utility's equipment. The procedure for determining the applicability of standby charges to a disconnection event shall be specified in the Company's Schedule SS Standby Service tariff.

- 9. Prevention of Interference: The Seller shall not operate equipment that superimposes a voltage or current upon the Company's system that interferes with the Company's operations, service to the Company's customers, or the Company's communication facilities. Such interference shall include, but not be limited to, overcurrent, voltage imbalance, and abnormal waveforms. If such interference occurs, the Seller must diligently pursue and take corrective action at its own expense after being given notice and reasonable time to do so by the Company. If the Seller does not take timely corrective action, or continues to operate the equipment causing interference without restriction or limit, the Company may disconnect the Seller's equipment from the Company's system.
- 10. <u>Location of Metering</u>: Where Company-owned metering is located on the Seller's premises, the Seller shall provide, at no expense to the Company, a suitable location for and access to all such metering.
- 11. <u>Design Reviews and Inspections</u>: The Company's review and authorization to allow the Facility to interconnect and operate in parallel with the Company's system shall not be construed as confirming or endorsing the Facility's design or as warranting the Facility's safety, durability or reliability. The Company shall not, by reason of such review or lack of review, be responsible for the equipment, including but not limited to, the safety, strength, adequacy, durability, reliability, performance, or capacity of such equipment.
- 12. <u>Permits, Approvals, and Licenses</u>: The Seller shall obtain, at its expense, any and all authorizations, approvals, permits, and licenses required for the construction and operation of the Facility and the interconnection with the Company's system, including but not limited to environmental permits, building permits, rights-of-way, or easements.
- 13. <u>Term</u>: This Agreement shall become effective when executed by the Seller and the Company and shall continue in effect for the duration of the FIT Term as defined in Seller's Schedule FIT Agreement.
- 14. <u>Termination</u>: The provisions for termination of this Agreement shall be the same as those set forth in Seller's Schedule FIT Agreement.
- 15. <u>Disconnection and Survival of Obligations</u>: Upon termination of this Agreement the Facility shall be disconnected from the Company's system. The termination of this Agreement shall not relieve the parties of their liabilities and obligations, owed or continuing at the time of the termination.

## 16. Indemnification:

- (a) The Seller shall indemnify, defend and hold harmless the Company and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Company's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Seller (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, and/or arising out of the installation, operation and maintenance of the Facility and/or the Seller Interconnection Facilities, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Company or its officers, directors, agents or employees.
- (b) The Company shall indemnify, defend and hold harmless the Seller, and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Seller's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Company (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, and/or arising out of the installation, operation and maintenance of the Company System and/or the Company Interconnection Facilities, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Seller or its officers, directors, agents or employees.
- (c) Nothing in this Agreement shall create any duty to, any standard of care with reference to, or any liability to any person or entity not a party to it.
- 17. <u>Insurance</u>: The Seller shall, at its own expense and during the term of the Agreement and any other time that the Facility is interconnected with the Company's system, maintain in effect with a responsible insurance company authorized to do insurance business in Hawaii, insurance that will adequately protect the Seller and the Company with respect to risks arising under this Agreement, including the Facility's interconnection with the Company's system, as provided for in Seller's Schedule FIT Agreement. The Seller's indemnity and other obligations shall not be limited by this provision. Proof of such insurance, including certificates of insurance showing the form and amounts of coverage, must be provided to the Company prior to any parallel interconnection.
- 18. <u>Force Majeure</u>: For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected party; and (b) that the affected party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes;

embargoes; and sabotage. If a Force Majeure Event prevents a party from fulfilling any obligations under this Agreement, such party will promptly notify the other party in writing, and will keep the other party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected party will specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected party is taking to mitigate the effects of the event on its performance. The affected party will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of reasonable efforts. The affected party will use reasonable efforts to resume its performance as soon as possible.

- 19. <u>Warranties</u>: The Company and the Seller each represents and warrants respectively that:
  - (a) It has all necessary right, power and authority to execute, deliver and perform this Agreement.
  - (b) The execution, delivery and performance of this Agreement by it will not result in a violation of any law or regulation of any governmental authority, or conflict with, or result in a breach of, or cause a default under, any agreement or instrument to which such party is also a party or by which it is bound.

# 20. <u>Miscellaneous</u>:

- (a) Amendments. Any amendment or modification of this Agreement or any part hereof shall not be valid unless in writing and signed by the parties. Any waiver hereunder shall not be valid unless in writing and signed by the party against whom waiver is asserted.
- (b) <u>Binding Effect</u>. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, legal representatives, and permitted assigns.
- (c) <u>Notices</u>. Any written notice provided hereunder shall be delivered personally or sent by registered or certified first class mail, with postage prepaid, to the other party at the following addresses:

Company:			
			_
	Attn:	<u> </u>	_

Seller: The mailing address listed in Exhibit A attached hereto.

Notice sent by mail shall be deemed to have been given on the date of actual delivery or at the expiration of the fifth day after the date of mailing, whichever is earlier. Any party

- hereto may change its address for written notice by giving written notice of such change to the other party hereto.
- (d) <u>Effect of Section and Exhibit Headings</u>. The headings or titles of the several sections and exhibits hereof are for convenience of reference and shall not affect the construction or interpretation of any provision of this Agreement.
- (e) <u>Relationship of Parties</u>. Nothing in this Agreement shall be deemed to constitute any party hereto as partner, agent or representative of the other party or to create any fiduciary relationship between the parties.
- (f) <u>Entire Agreement</u>. This Agreement constitutes the entire understanding and agreement between the Company and the Seller.
- (g) <u>Limitations</u>. Nothing in this Agreement shall limit the Company's ability to exercise its rights or expand or diminish its liability with respect to the provision of electrical service pursuant to the Company's Tariff as filed with the State of Hawaii Public Utilities Commission ("PUC"), or the PUC's Standards for Electric Utility Service in the State of Hawaii, which currently are included in the PUC's General Order Number 7, as either may be amended from time to time.
- (h) Governing Law and Regulatory Authority. This Agreement was executed in the State of Hawaii and must in all respects be governed by, interpreted, construed, and enforced in accordance with the laws thereof. This Agreement is subject to, and the parties' obligations hereunder include, operating in full compliance with all valid, applicable federal, state, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by, duly constituted regulatory authorities having jurisdiction.
- (i) <u>Multiple Counterparts</u>. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

IN WITNESS WHEREOF, the Company and the Seller have executed this Agreement as of the day and year first above written.

By	By
Name	Name
Title	Title
Date	Date
Ву	
Name	
Title	
Date	
"Company"	"Seller"

# **EXHIBIT A**

# DESCRIPTION OF SELLER'S GENERATING FACILITY

# Section 1, Applicant Information

Seller					
Name:					
Mailing					
Address:					
-			Zip		
City:	State:		Code:		
Telephone	<del></del>	- <u></u>	<del></del> -	<u> </u>	
(Daytime): Area	Numb	(Evening)	Area	Numb	
Code	er	Code		er	
	Account	_	<del></del>		
E-mail:	Number:				
Facility Location (if diff	erent from				
above):					
Facility Location Tax	Map Key				
number):	• •				
Section 2, Generator Qualification 1. Is Generator powered from a Natural Type of Nonfossil Fuel Source	Ionfossil Fuel Sour	Solar Biomas	Yes Wind [ Geothern	No Hydro mai	
PV Array DC Rated Output: kW	kW	s PV A	array AC Rate	ed Output:	
Maximum Site Load without C	Gener k\	W <u>Maxin</u>	num Generato	or Capability:	kW
Minimum Site Load without					
Generation:	k\	V	Maximu	m Export:	kW

# Section 3, Generator Technical Information Type of Synchronous Induction Inverter-Based Generating Generator: Facility Generator (or solar collector) Manufacturer, Model Name & Number: (A copy of Generator Nameplate and Manufacturer's Specification Sheet may be substituted) Nameplate Rating in kW: Operating Power Factor: Inverter Manufacturer, Model Name & Number (if used): (A copy of Inverter Nameplate and Manufacturer's Specification Sheet may be substituted) Rating in kW: Operating Power Factor: Number of Starts Per Day: Maximum Starting kVA: UF Trip Setting: UF Time Delay (Secs) Generator Grounding Method: Effectively Grounded Resonant Grounded Low-Inductance Grounded High-Resistance Grounded Low-Resistance Grounded Ungrounded

# Generator Characteristic Data (for rotating machines): (Not needed if Generator Nameplate and Manufacturer's Specification Sheet are provided)

Direct Axis Synchronous	P.U.	Negative Sequence	P.U
Reactance, X <sub>d</sub> :	Reactance:		·
Direct Axis Transient Reactance, X' <sub>d</sub> :	P.U. Reactance:	Zero Sequence	P.U
Direct Axis Subtransient Reactance,	P.U.	KVA	<u> </u>
X" <sub>d</sub> :	Base:		
Inertia Constant,			
H:	P.U.		
Excitation Response	·		
Ratio:			
Direct Axis Open-Circuit Transient	Time		
Constant, T'do:		Seconds	
Direct Axis Open-Circuit Subtransient	Time		
Constant, T"do:		Seconds	
Fault Current Contribution of Generator:  Section 4, Interconnecting Equipment Tec			
Section 4, Interconnecting Squipment 100			
Will an interposing transformer be used betwinterconnection?	een the generato	r and the point of	Yes No
Transformer Data (if applicable, for Seller O	wned Transform	ier):	
(A copy of transformer Nameplate and M			bstituted)
(1. copy or 1.		· · · · ·	
Size: KVA. Transformer Primary:	Volts	Delta Wye	Wye Grounded
Transformer Secondary:	Volts	Delta Wye	Wye Grounded
Transformer			
Impedance: % on	KVA	Base	
Transformer Fuse Data (if applicable, for Sel	ler Owned Fuse)	<u>:</u>	
(Attach copy of fuse manufacturer's Mini			ırrent Curves)
At Primary Voltage Secon	ndary Voltage		

:	:	Size:	Speed:
Transformer Protection (if	not fuse):		
	<del></del>		
Please			
describe:			
Interconnecting Circuit Bre (A copy of circuit breake	eaker (if applicable): er's Nameplate and Specification	n Sheet may be	substituted)
(A copy of circuit breake		n Sheet may be	substituted)
(A copy of circuit breake Manufacturer	er's Nameplate and Specification	n Sheet may be	substituted)
(A copy of circuit breake Manufacturer	er's Nameplate and Specification	·	substituted)
(A copy of circuit breake Manufacturer	er's Nameplate and Specification	pe:	substituted)

•

(Enclose conv of an		<u> 11 applicable):</u> me-Overcurrent Coordina	tion Curves)	
(Enclose copy of an	y proposed ri	Style/Catalog	Proposed	
Manufacturer:	Type:	No.:		
		Style/Catalog	Proposed	
Manufacturer:	Type:	No.:		
		Style/Catalog	Proposed	
Manufacturer:	Type:	No.:	Setting:	
		Style/Catalog	Proposed	
Manufacturer:	Type:	No.:	•	
		Style/Catalog	Proposed	
Manufacturer:	Type: _	No.:	Setting:	
Current Transformer (Enclose copy of M Manufacturer : Manufacturer		able): Excitation & Ratio Correc Accuracy Class: Accuracy	tion Curves) Proposed Ratio Connection: Proposed Ratio	/5
:	_ :	Class:	Connection:	/5
•	•	ation device) must be installe hnical Requirements.  Catalog  No.:  Rateo	Ra	need in the FIT
			<del></del>	
Single or 3		Mounting		
Phase:		Location:		<del></del>
1 7	single-line diag	rmation gram showing configuration otection and control scheme		equipment,
current and potential	circuits and pr	Is Single-Line Diagram E		
		ip scheme, which shall inclu operate the Facility in a safe Are Relay List and Trip E	and reliable manner.	nizing and

Enclose copy of site three-line diagram (if the Facility's capacity showing potential transformer and current transformer ratios, and	-
including relays, meters, and test switches.  Is Three-Line Diagram Er	nclosed? Yes

Section 6, Insta	allation Details		
Installing Contractor:	Electrical	Firm :	License No.:
Mailing Address	s:		
City:		State:	Zip Code:
Telephone: Code:	Area	Number:	
Installation Date:			Date:
Supply certificat local Building/Electric county of		ating system has been installed	and inspected in compliance with the .
Signed (Inspector):			Date:
may be attache		signature of Inspector, a cop	y of the final inspection certificate
<u>s</u>	ection 7, Generate	or/Equipment Certification	
Electronics Eng Agreement is e applicable Nati Electronics Engi at the time this generating eq	ineers IEEE Std 1. executed. Genera onal Electrical C ineers standards ar Agreement is exec	547 and Underwriters Laborating systems that use a rotal Code, Underwriters Laborated rules and orders of the Hawkuted. By signing below, the appropriate preceding	empliant with <i>Institute of Electrical and</i> atories <i>UL 1741</i> in effect at the time this ating machine must be compliant with pries, and Institute of Electrical and aii Public Utilities Commission in effect <b>Applicant certifies that the installed g requirement(s) and can supply</b>
Signed (Seller):			Date:
Section 8, Insu Insurance Carrier:	rance		

#### **EXHIBIT B**

#### FACILITY OWNED BY THE SELLER

# 1. Facility

- a. <u>Compliance with laws and standards</u>. The Facility, Facility design, and Facility design drawings shall meet all applicable national, state, and local laws, rules, regulations, orders, construction and safety codes, and shall satisfy the Company's FIT Interconnection Standards And Technical Requirements ("Interconnection Standards").
- b. Avoidance of adverse system conditions. The Facility shall be designed, installed, operated and maintained so as to prevent or protect against adverse conditions on the Company's system that can cause electric service degradation, equipment damage, or harm to persons, such as:
  - (i) Unintended islanding.
  - (ii) Inadvertent and unwanted re-energization of a Company dead line or bus.
  - (iii) Interconnection while out of synchronization.
  - (iv) Overcurrent.
  - (v) Voltage imbalance.
  - (vi) Ground faults.
  - (vii) Generated alternating current frequency outside of permitted safe limits.
  - (viii) Voltage outside permitted limits.
  - (ix) Poor power factor or reactive power outside permitted limits.
  - (x) Abnormal waveforms.

- Specification of protection, synchronizing and control requirements. The Seller shall c. provide the design drawings, operating manuals, manufacturer's brochures/instruction manual and technical specifications, manufacturer's test reports, bill of material, protection and synchronizing relays and settings, and protection, synchronizing, and control schemes for the Facility to the Company for its review, and the Company shall have the right to specify the protection and synchronizing relays and settings, and protection, synchronizing and control schemes that affect the reliability and safety of operation and power quality of the Company's system with which the Facility is interconnected ("Facility Protection Devices/Schemes"). After the implementation of the protection and synchronizing relays and settings, and protection, synchronizing and control schemes, the Company may require changes in the protection and synchronizing relays and settings, and protection, synchronizing and control schemes, when required by the Company's system operations, at the Company's expense. After the implementation of the protection and synchronizing relays and settings, and protection, synchronizing and control schemes, the Company may require changes in the protection and synchronizing relays and settings, and protection, synchronizing and control schemes, when required by the Facility's operations, at the Seller's expense.
- d. <u>Facility protection</u>. The Seller is solely responsible for providing adequate protection for the Facility.
- e. Seller Interconnection Facilities.
  - (i) The Seller shall furnish, install, operate and maintain interconnection facilities (such as circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes) designated by or acceptable to the Company as suitable for parallel operation of the Facility with the Company's system ("Seller Interconnection Facilities"). Such facilities shall be accessible at all times to authorized Company personnel.

- (ii) The Seller shall comply with Apppendix I of the Company's Rule 14H (the Company's "Interconnection Standards"). If a conflict exists between the Interconnection Standards and this Agreement, the Interconnection Standards will control.
- (iii) A 1) single-line diagram, 2) relay list, trip scheme and settings of the Facility, 3) Facility Equipment List, and 4) three-line diagram (if the Facility's capacity is greater than or equal to 30 kW), which identify the circuit breakers, relays. switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes, shall, after having obtained prior consent from the Company, be attached to this Exhibit B and made a part hereof at the time the Agreement is signed. The single-line diagram shall include pertinent information regarding operation, protection, synchronizing, control, monitoring and alarm requirements. The single-line diagram and three-line diagram shall expressly identify the point of interconnection of the Facility to the Company's system. The relay list, trip scheme and settings shall include all protection, synchronizing and auxiliary relays that are required to operate the Facility in a safe and reliable manner. The three-line diagram shall show potential transformer and current transformer ratios, and details of the Facility's configuration, including relays, meters, and test switches.
- f. Approval of Design Drawings. If the Facility's capacity is greater than or equal to 30 kW, the single-line diagram, relay list, trip scheme and settings of the Facility, and three-line diagram shall be approved by a Professional Electrical Engineer registered in the State of Hawaii prior to being submitted to the Company. Such approval shall be indicated by the engineer's professional seal on all drawings and documents.

# 2. Verification Testing.

a. Upon initial parallel operation of the Facility, or any time interface hardware or software is changed, a verification test of Seller Interconnection Facilities shall be performed by Seller. A qualified individual, hired or employed by the Seller, shall perform the verification testing in accordance with the manufacturer's published test

procedure. Qualified individuals include professional engineers, factory trained and certified technicians, and licensed electricians with experience in testing protective equipment. The Company reserves the right to witness verification testing or require written certification that the testing was performed.

- b. Verification testing shall be performed every four years. All verification tests prescribed by the manufacturer shall be performed. If wires must be removed to perform certain tests, each wire and each terminal shall be clearly and permanently marked. The Seller shall maintain verification test reports for inspection by the Company.
- c. Single-phase inverters rated 10 kVA and below (if any) shall be verified once per year as follows: once per year the Seller shall operate the load break disconnect switch and verify the Facility automatically shuts down and does not reconnect with the Company's system until the Company's system continuous normal voltage and frequency have been maintained for a minimum of 5 minutes. The Seller shall maintain a log of these operations for inspection by the Company.
- d. Any system that depends upon a battery for trip power shall be checked once per month for proper voltage. Once every four (4) years the battery shall either be replaced or have a discharge test performed. The Seller shall maintain a log of these operations for inspection by the Company.
- e. Tests and battery replacements as specified in this section 2 of Exhibit B shall be at the Seller's expense.

# 3. <u>Inspection of the Facility</u>.

- a. The Company may, in its discretion and upon reasonable notice not to be less than 24 hours (unless otherwise agreed to by the Company and the Seller), observe the construction of the Facility (including but not limited to relay settings and trip schemes) and the equipment to be installed therein.
- b. Within fourteen days after receiving a written request from the Seller to begin producing electric energy in parallel with the Company's system, the Company may inspect the Facility (including but not limited to relay settings and trip schemes) and observe the performance of the verification testing. The Company may accept or reject the request to begin producing electric energy based upon the inspection or verification test results.
- c. If the Company does not perform an inspection of the Facility (including but not limited to relay settings and trip schemes) and observe the performance of verification testing within the fourteen-day period, the Seller may begin to produce energy after certifying to the Company that the Facility has been tested in accordance with the verification testing requirements and has successfully completed such tests. After receiving the certification, the Company may conduct an inspection of the Facility (including but not limited to relay settings and trip schemes) and make reasonable inquiries of the Seller, but only for

purposes of determining whether the verification tests were properly performed. The Seller shall not be required to perform the verification tests a second time, unless irregularities appear in the verification test report or there are other objective indications that the tests were not properly performed in the first instance.

d. The Company may, in its discretion and upon reasonable notice not to be less than 24 hours (unless an apparent safety or emergency situation exists which requires immediate inspection to resolve a known or suspected problem), inspect the Facility (including but not limited to relay settings and trip schemes) and its operations (including but not limited to the operation of control, synchronizing, and protection schemes) after the Facility commences operations.

# 4. Operating Records and Procedures.

- a. The Company may require periodic reviews of the maintenance records, and available operating procedures and policies of the Facility.
- b. The Seller must separate the Facility from the Company's system whenever requested to do so by the Company's System Operator pursuant to Sections 8 and 9 of the Agreement. It is understood and agreed that at times it may not be possible for the Company to accept electric energy due to temporary operating conditions on the Company's system, and these periods shall be specified by the Company's System Operator. Notice shall be given in advance when these are scheduled operating conditions.
- c. Logs shall be kept by the Seller for information on unit availability including reasons for planned and forced outages; circuit breaker trip operations, relay operations, including target initiation and other unusual events. The Company shall have the right to review these logs, especially in analyzing system disturbance.

# 5. Changes to the Facility, Operating Records, and Operating Procedures.

- a. The Seller agrees that no material changes or additions to the Facility as reflected in the single-line diagram, relay list, trip scheme and settings of the Facility, Facility Equipment List, and three-line diagram (if the Facility's capacity is greater than or equal to 30 kW), shall be made without having obtained prior written consent from the Company.
- b. As a result of the observations and inspections of the Facility (including but not limited to relay list, trip scheme and settings) and the performance of the verification tests, if any changes in or additions to the Facility, operating records, and operating procedures and policies are required by the Company, the Company shall specify such changes or additions to the Seller in writing, and the Seller shall, as soon as practicable, but in no event later than thirty (30) days after receipt of such changes or additions, respond in writing, either noting agreement and action to be taken or reasons for disagreement. If the Seller disagrees with the Company, it shall note alternatives it will take to accomplish the

same intent, or provide the Company with a reasonable explanation as to why no action is required by good engineering practice.

# **Facility Equipment List**

The Facility shall include the following equipment:

(This Facility Equipment List, together with the single-line diagram, relay list and trip scheme, and three-line diagram (if the Facility's capacity is greater than or equal to 30 kW), should be attached behind Exhibit B.

#### EXHIBIT C

# INTERCONNECTION FACILITIES OWNED BY THE COMPANY

## 1. Description of Company Interconnection Facilities

The Company will purchase, construct, own, operate and maintain all interconnection facilities required to interconnect the Company's system with the Facility at \_\_\_\_ volts, up to the point of interconnection.

The Company Interconnection Facilities, for which the Seller shall pay, include:

[Need to specify the interconnection facilities. If no interconnection facilities, state "None".]

# 2. Seller Payment to Company for Company Interconnection Facilities

The Seller shall pay to the Company the total estimated interconnection cost to be incurred by the Company (Total Estimated Interconnection Cost), which is comprised of (i) the estimated cost of the Company Interconnection Facilities, (ii) the estimated engineering costs associated with developing the Company Interconnection Facilities. The following summarizes the Total Estimated Interconnection Cost:

Description Estimated Cost (\$)

[Need to specify the estimated interconnection cost. If no cost, state "None". If the Company determines that there are benefits to the utility system due to the Company interconnection facilities, a credit reflecting these benefits shall be provided to the Seller, subject to Commission approval. See Appendix III, Section 2.d concerning this subject. The amount of the credit reflecting these benefits, if any, would be reflected in this section of the Standard Interconnection Agreement.]

#### Total Estimated Interconnection Cost S

The Total Estimated Interconnection Cost, which, except as otherwise provided herein, is non-refundable, shall be paid by the Seller fourteen (14) days after receipt of an invoice from the Company, which shall be provided not less than thirty (30) days prior to start of procurement of the Company Interconnection Facilities.

Within thirty (30) days of receipt of an invoice, which shall be provided within fourteen (14) days of the final accounting, which shall take place within sixty (60) days of completion of construction of the Company Interconnection Facilities, the Seller shall remit to the Company the difference between the Total Estimated Interconnection Cost paid to date and the lesser of one hundred twenty percent (120%) of the Total Estimated Interconnection Cost or the total actual interconnection cost (Total Actual Interconnection Cost). The latter is comprised of (i) the total

costs of the Company Interconnection Facilities, and (ii) the total engineering costs associated with developing the Company Interconnection Facilities. If the Total Actual Interconnection Cost is less than the payments received by the Company as the Total Estimated Interconnection Cost, the Company shall repay the difference to the Seller within thirty (30) days of the final accounting.

If the Agreement is terminated prior to the Seller's payment for the Total Actual Interconnection Cost (or the portion of this cost which has been incurred) or prior to the Company's repayment of the overcollected amount of the Total Estimated Interconnection Cost (or the portion of this cost which has been paid), such payments shall be made by the Seller or Company, as appropriate. If payment is due to the Company, the Seller shall pay within thirty (30) days of receipt of an invoice, which shall be provided within fourteen (14) days of the final accounting, which shall take place within sixty (60) days of the date the Agreement is terminated. If payment is due to the Seller, the Company shall pay within thirty (30) days of the final accounting.

All Company Interconnection Facilities shall be the property of the Company.

## 3. Seller Use of Company Interconnection Facilities Upon Termination

Notwithstanding that all Company Interconnection Facilities are the property of the Company, upon termination of the Agreement, the Company shall identify any equipment paid for by the Seller that can feasibly be returned to the Seller. If Seller desires such equipment, Seller may acquire such equipment if Seller pays for the removal of the equipment and the restoration of the Company's system to the Company's satisfaction.

#### APPENDIX C

# **PURCHASE OF ENERGY BY COMPANY**

1. Rate for Purchase of Energy. Subject to the provisions of this Agreement, the Company shall purchase and pay for energy generated by Seller's Facility and delivered by Seller to the Company, and for energy that would have been generated by the Facility and delivered to the Company's System, but for curtailment by the Company of such generation and/or delivery, at the rate set forth in Table C-1 below beginning from the Commercial Operation Date.

[Table C-1 placeholder]

<u>Year</u>

Years 1-20

<u>Rate</u>

\$0.xxxx/kWh

## **CERTIFICATE OF SERVICE**

I hereby certify that I have this date filed and served the original and eight copies of the foregoing PROPOSED TIERS 1 AND 2 TARIFFS OF CLEAN ENERGY

MAULLIC AND ZERO EMISSIONS LEASING LLC in Docket No. 2008-0273, by hand delivery to the Commission at the following address:

CARLITO CALIBOSO PUBLIC UTILITIES COMMISSION 465 S. King Street, Suite 103 Honolulu, HI 96813

1 further certify that copies of the foregoing PROPOSED TIERS 1 AND 2

## TARIFFS OF CLEAN ENERGY MAUI LLC AND ZERO EMISSIONS LEASING

LLC have been served upon the following parties and participants by causing copies hereof to be hand delivered, mailed by first class mail or electronically transmitted to each such party as follows:

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DATED: Honolulu, Hawaii, January 7, 2010

**ERIK KVAM**